I. EXECUTIVE SUMMARY

The Department of Mental Health (DMH) and the Department of Alcohol and Drug Programs (ADP) have jointly funded four demonstration projects designed to integrate treatment and services for clients diagnosed with both a severe mental illness and a substance abuse problem, commonly referred to as “dual diagnosis.” The four projects are in the counties of Contra Costa, Merced, San Diego, and Santa Cruz. Originally funded for three years starting in mid 1997, and expected to end in mid 2000, the projects have been extended for an additional year to provide a longer follow-up period for data collection. This interim report covers the period from the start of the projects through December 31, 1999. It provides a description of client characteristics and baseline scores on five instruments administered to clients at admission. It also provides a description of the qualifications of the staff who are providing these integrated services.

Demographic characteristics of project participants are similar at the four sites. All four projects have more male clients than female, with 57.4% of all participants being male. All four sites had clients that ranged in age from under 20 years old to over 49, with most clients at all four sites being in their 30's and 40's.

The racial/ethnic background of clients varies by project. The three most frequent racial/ethnic categories at each site are as follows: Contra Costa has 47% African American, 31% white, and 7% Hispanic; Merced has 62% white, 24.8% Hispanic, and 11.9% African American; San Diego has 68% white, 10% Hispanic, and 8% African America; Santa Cruz has 68% white, 10% Hispanic, and 12% African American.

Mental Health Diagnosis for most of the participants is either a schizophrenic disorder or a mood disorder.

Substance Abuse diagnoses differed between the four projects. Two of the projects report that the most frequent drug problem was alcohol, one reported polydrug use as the most frequent, and one report the use of cocaine. It is noteworthy that alcohol is a problem at all sites, either as the most frequent or the second most frequent substance abused.

Kennedy Axis V (K Axis) scores at admission to the projects indicate that the clients are having serious or major difficulties functioning in many areas of their lives. They are having the most difficulty in the areas of psychological functioning and substance abuse, indicating major to serious impairment. Clients are rated as having the least difficulties with medical problems, scores indicate mild difficulties.

Quality of Life scores indicate that clients at all four sites are least satisfied with their finances and most satisfied with their safety. When the finance items are examined individually, clients at all four sites report adequate money for food. At three of the sites, most clients report not having enough money for clothing, housing, travel, etc. At the fourth site, clients report adequate money for food,

housing and local travel, but inadequate funds for clothing and social activities. Most clients at all four sites reported mixed feelings of satisfaction with the other aspects of their lives.

Contact with family members occurs monthly or more often for a majority of clients at two of the sites, while the other two projects report that roughly a third of their clients have contact with their families once a month or more often. As measured by the CA-QOL, roughly a quarter of the clients at all four sites report being a crime victim within the past month, and at three of the sites, roughly a fifth report being arrested or picked-up by the police within the previous month.

Addiction Severity Index (ASI) assessment scores indicate that clients rate alcohol and drug problems as the least severe of their problems, with employment being their most severe problem. Scores for alcohol and drug are surprisingly low on this client-rated instrument. It was expected that these areas would be rated as a severe problem for these dually diagnosed clients. Possible reasons for the low scores include denial by the clients, problems with using the ASI to assess this population, the time when baseline data are collected, and problems with self-report forms for this population. Hopefully, these score, although low, will decline over time, indicating a lessening of problems in these areas.

The Behavior and Symptom Identification Scale (BASIS-32) scores are positive in most areas, with the most positive scores on scales that measure psychosis and impulsive/addictive difficulties. At all four sites, the area with the most difficulty in functioning is "depression/anxiety". At three of the sites, the score for relations with others is rated as low as the "depression/anxiety" scores. The positive ratings in the areas of "psychosis" and "addictive/impulsiveness" may be explained by some of the same reasons advanced regarding the ASI (e.g., denial, poor instrument for this population).

On the SF-12 Clients at all four sites gave themselves good ratings on their physical health and somewhat lower scores, on mental health. Both scores were well above the median on the positive, least impaired side of the scale. At the fourth site, scores were much lower for both physical and mental health.

Common themes which have emerged include: a) dually diagnosed clients are a challenge to engage in treatment, b) relapse is common with these clients, c) housing is a critical element in stabilizing clients, and that programs need to be revised to meet the specific needs of individual clients. A one-size-fits-all program isn't effective with this diverse group of clients.

II. INTRODUCTION

The Department of Mental Health (DMH) and the Department of Alcohol and Drug Programs (ADP) have jointly funded four demonstration projects designed to integrate treatment and services for clients diagnosed with both a severe mental illness and a substance abuse problem, commonly referred to as "dual diagnosis."

The four projects were selected from among 31 proposals submitted in response to a Request for Applications to Implement Dual Diagnosis Treatment Programs, issued in November 1996. The proposals were reviewed and the choices announced in March 1997. The four counties selected were Contra Costa, Merced, San Diego and Santa Cruz.

The programs were originally funded for three years, starting in mid 1997, and expected to end in mid 2000. One additional year of funding has been requested to provide a longer follow-up period for data collection. This additional funding has been approved and will continue the projects until mid year 2001.

The programs experienced some delays in starting, but three were accepting clients by July of 1997. The fourth county, Contra Costa, started accepting clients in November 1997.

A program evaluation is included as part of each demonstration project. The evaluations are being completed by independent consultants with oversight from the State's Project Evaluation Director for the Dual Diagnosis Projects. The independent consultants were hired by the individual counties conducting the demonstration projects. Three counties independently hired the same consultant, The Center for Applied Local Research, headed by Tom Foster. The fourth program hired Dr. Richard Hough, professor at San Diego State University and co-director of the Center for Research on Child & Adolescent Mental Health Services.

This interim report covers the period from the start of the projects through December 31, 1999. The next section will describe the goal of the research and the evaluation design. The fourth section will describe the treatment model implemented by each project and describe the current status of each project. The fifth section will present demographic data on clients. The sixth section will present data on clients' admission scores on the various instruments. The seventh section will present qualitative data from the projects, including case studies and staff survey results. The eighth section is the conclusion and it discusses common themes that are emerging from the projects, how treatment effectiveness will be measured, and conclusions. Appendix B presents preliminary findings as reported by the individual projects. These findings are tentative, based on the limited data available at this time and should be viewed with caution.

III. EVALUATION DESIGN AND METHODS

Goal of Evaluation

The goal of the evaluation is to provide accurate and comprehensive data on the comparative effectiveness of integrated treatment on clinical outcomes, consumer satisfaction, client quality of life, cost and cost savings/avoidance in the areas of physical health care and criminal justice. Specifically, the evaluation will attempt to answer these questions:

- Will integrated treatment improve clients' psychiatric functioning?
- Will integrated treatment decrease substance abuse?
- Will integrated treatment improve client quality of life?
- Will integrated treatment reduce costs for physical health care?
- Will integrated treatment decrease criminal justice costs?
- Will integrated treatment decrease mental health treatment costs?
- Will integrated treatment decrease substance abuse treatment costs?

Human Subjects Review

Once the contracts were awarded, the evaluation protocol was presented to the state of California Health and Human Services Committee for the Protection of Human Subjects in April of 1997. This review affected the evaluation design. After reviewing the proposal, several members of the committee informally suggested to DMH staff that the project was really a program evaluation, not research, and thus exempt from review by the Committee. The DMH's legal counsel was asked to review the issues to see if the project was indeed exempt from the committee's review.

The legal office reviewed a number of documents pertaining to requirements that certain types of research are subject to review by the committee. Documents reviewed included the Multiple Project Assurance M-1400 for California, which was approved by the Department of Health and Human Services, The Belmont Report, and Part 46 of Title 45 of the Code of Federal Regulations. The conclusion was that the Dual Diagnosis Evaluation would be exempt if it met the following criteria: 1) There is no research design-based selection procedure, (i.e., no control group; admission to the program is dependent on individual assessment, not on research design requirements); 2) Data collected will have no effect on the continued participation of any individual in the programs; 3) Information will be coded in such a way that any particular individual cannot be identified; 4) Data collected would be generated anyway in the normal course of running the program and thus there is little chance of adverse effect on participants. Counsel concluded that the evaluation should be exempt from the requirement of review by the Committee for the Protection of Human Subjects because it met the exemption criteria.

As an additional safeguard, the four proposals were reviewed by staff at DMH and ADP who are experts in research methods. The unanimous conclusion was that the evaluation would meet the criteria if there was no wait-list comparison

group, as several of the projects had proposed. All projects agreed to revise the evaluation design so that there would be no comparisons made or testing completed of anyone on a program waiting list. Thus, the only comparisons would be before and after with the clients serving as their own comparison.

While the state-level evaluation is exempt from review, both independent evaluators required approval from their local Institutional Review Boards (IRB). Both have received this approval from their respective IRBs.

Evaluation Design

The evaluation design is non-experimental. The client's own history, along with testing at admission, will be used as a baseline for comparison. Data will be collected on each client's use of mental health services, alcohol & drug treatment services, physical health care services, and criminal justice encounters for one year prior to admission to the program.

Repeated measures of client functioning will come from a set of instruments administered in a standardized fashion to clients at admission to the programs and every 6 months thereafter, until the demonstration projects end. Clients who drop out of the project will not be followed-up. To provide comparability, the four projects have agreed to use the same core set of instruments to assess client status and functioning (see Data Sources, below). These instruments provide multiple measures of such outcome variables as substance abuse, mental health status, quality of life, client satisfaction, physical health status, criminal justice involvement, and social functioning. Multiple measures are especially important when dealing with a population which has two chronic relapsing conditions. For these clients, relapses will almost certainly occur and using a single measure will obscure the actual improvements which have occurred in other areas of the clients life. Multiple measures will provide a more comprehensive picture of program impact.

Additionally, all four sites have agreed to use actual encountered client data of treatment encounters for physical health care, mental health care, alcohol & drug treatment, and criminal justice involvement by the program clients. These data will be collected for the baseline period (one year prior to admission to the project) and then for the duration of the project.

All data will be collected through December 31, 2000. The analysis of these data will be completed by the independent contractors, who will also write the report for each of the projects. The State Project Evaluation Director will write the final report and compile the chapters into a full report. The report will be submitted to the Dual Diagnosis Task Force by December 2001.

Sample Selection

The target population for the treatment programs are clients with severe mental illness with a co-occurring substance abuse problem. These conditions are defined by client meeting the criteria the DSM-IV classification for Axis 1 diagnosis for mental illness and any diagnosis, using DSM-IV criteria, for substance abuse problems. Any client who enters the treatment program is a candidate for the evaluation study. There is no selection by the evaluation team. Clients can choose to participate in the evaluation or not.

Data Sources

There are five sources of data for this project, excluding the sources for the cost data. Data sources include clinical data from the clients, physical health care data from the Medi-Cal data base; mental health service utilization data from the state DMH data base; substance abuse treatment utilization from the state ADP data base; and criminal justice data from the California Department of Justice. Sources for the cost data are still being identified.

Clinical Data: The four projects initially agreed to use a core set of 7 instruments to assess client status and functioning. This was later modified to six core instruments. The 7 instruments are the Addiction Severity Index (ASI), the Behavioral Health Rating of Satisfaction (BHRS), the Basis-32, the SF-36, the Kennedy Axis-5 sub-scales (K Axis), Brief Psychiatric Rating Scale (BPRS), and Lehman's Quality of Life.

Project staff had difficulties in both finding the time and in administering the 7 forms. After some discussion, the evaluation team and outside evaluators agreed to switch to shorter versions of three of the forms, and to eliminate another form. The ASI Lite was substituted for the full ASI, the SF-12 was substituted for the SF-36, and the California Quality of Life (CAQOL), which is derived from Lehman's Quality of life, was substituted for the Lehman's. The CA-QOL is self administered while the Lehman's was administered by staff. Using the self-administered form saved staff time. The BPRS was eliminated since it duplicated information on psychiatric functioning provided by the K Axis. The goal was to make the data collection process less onerous for clinical staff and thus improve data collection.

The ASI Lite, Basis-32 and K Axis will measure substance abuse problems. Psychiatric functioning will be measured by the K Axis and ASI Lite. Additional mental health ratings will come from the SF-12 and the B-32. Quality-of-life will be measured by CA-QOL and ASI. Physical health will be measured by the ASI Lite, SF12, CA-QOL, SF-12 and K Axis. Client satisfaction will be measured by the BHRS. Client overall functioning in daily life will be measured by the CA-QOL, ASI, K Axis, and SF-12.

These instruments are administered to clients when they enter the program, except for the BHRS which asks for program evaluation and thus is not administered at admission. All forms are administered every six months after admission, as long as the client is in the program.

Physical Health Data: Data on actual physical health care encounters will be collected for each client. Some of these data will come from the state data bases (Medi-Cal data bases) and some from local HMO providers. The state level data will be obtained by the DMH Statistics and Data Analysis unit and given on diskette to the independent evaluators. The HMO data will be obtained by the county program staff and given to the independent evaluators. The lag time, i.e., the time between when the treatment is provided and it appears in the data base, is approximately 6 months. Tentatively, the cost for physical health care encounters will be based on average costs for each category of service. This issue will be reviewed in more detail by the independent evaluators and the state evaluation team.

Criminal Justice Data: The criminal justice data will come from the California Department of Justice, State Summary Criminal History Records. These records, often referred by the slang term "rap sheets," contain information on arrests, convictions and dispositions. Counts of actual arrests, incarcerations, probation sentences, etc., will be collected for each client in the study. Costs for each of these types of encounters will be identified. This may be an "off-the-shelf" cost figure that local agencies use for billing for their services or it may be based on average cost per capita computed from agency costs as listed in government documents. These data will be collected for one year preceding the clients' involvement in the Dual Diagnosis project, and for the period during and following treatment, up to the end of the evaluation period. The criminal justice data will be collected by program staff and provided to the independent evaluators for analysis. The criminal justice data will be collected at the end of the data collection, in early 2001. The lag time for these data are approximately 90 days.

Mental Health Treatment Data: These data will come from the DMH Client Data System and Client Services Information System. Encounters with treatment providers will be counted for each client for the baseline period and for the duration of the project. These data will be obtained at the end of the project by the DMH Statistics and Data Analysis unit and forwarded to the independent evaluators. The lag time for this data base is approximately 60 days. Tentatively, cost data will come from either the Standard Maximum Allowance rates or from the Average of Actual Costs for previous years. This issue will be reviewed in more detail by the independent evaluators and the state evaluation team.

Drug & Alcohol Treatment Data: These data will come from the ADP's California Alcohol and Drug Data System (CADDS). Data on encounters with treatment providers will be collected for each client, for the baseline and for the duration of the project. These data will be obtained after the end of the data collection, in early 2001, by research staff at the ADP and will be given to the independent evaluators. The lag time for this data base is approximately 90 days. Tentatively, cost data will be based on cost estimates prepared for budget purposes by ADP.

Administration of Instruments

Two of the instruments are administered by the program staff at each site. The ASI and the K Axis are administered by staff. The ASI can be administered by any project staff, but the K Axis (and the BPRS when it was included), must be administered by a qualified mental health worker. The ASI list is a client complete form. Table 1 lists the qualifications.

The remaining four instruments are self administered (BHRS, Basis-32, SF12 and the CA-QOL) together with the ASI list. These are given to the clients by program staff.

TABLE 1 Qualifications needed to administer the K Axis

Clinician must meet any one of the qualification listed below

- Licensed Practitioner of the Healing Arts (MD, LCSW, MFCC, Licensed Psychologist, RN)
- Paraprofessionals in the behavioral sciences who are overseen by licensed or licensed waiver staff. Paraprofessionals would be those individuals with a bachelor's degrees in psychology or a related field and at least 3 units of graduate-level work in each of these areas: Testing/assessment; Abnormal psychology; Personality Theory; and Counseling Psychology.
- Waivered staff
- Psychologist Interns

Procedures for Handling Administration of Instruments: Because the dually diagnosed clients are prone to drop out of treatment programs, administering the instruments in a routine fashion will be a challenge. Guidelines were developed to provide a framework for collecting the data in comparable time frames for all the projects. At admission, staff have 60 days to collect admission data. On the follow-up period they have two months to collect the data.

Data Collection Monitoring

The data collection process is being monitored by the state evaluation team. For the core instruments, the data collected is reviewed several times a month by the State Project Evaluation Director. Both outside evaluators provide the state with a monthly listing of instruments completed and due dates.

The criminal justice data will be collected at the end of the clinical data collection process. In January 2001, the programs will code the criminal justice data at the program and forward it to the independent evaluators. The State Project Evaluation Director will monitor the collection of these data.

The production and delivery of the Medi-Cal data, the CDS/CSI data and the CADDS data also will be done after the end of the collection of clinical data.

Protecting Client Confidentiality

A number of steps have been taken to protect client confidentiality. First of all, participation in the evaluation is voluntary. Clients can decline to participate and still receive treatment services.

Secondly, clients who do agree to participate must sign release-of-information forms. These are kept on file by the programs.

An Oath of Confidentiality is required for program staff who handle the data. Oaths of Confidentiality are kept by the State Project Evaluation Director. This is in addition to the oath required by the counties as a condition of employment.

Another line of defense for clients is that the independent evaluators will not have any data with personal identifiers. At the three projects being handled by The Center for Applied Local Research, each client's data will have a case number but all personal identifiers, e.g., SSN and name, will be removed before the data are given to the independent evaluators. The key linking individuals with their case numbers will be kept by the program in a locked file separated from the completed copies of the core instruments. For the San Diego site, the unique identifiers will be on the data file but will be encrypted and thus not available to research staff.

Finally, the completed copies of the core instruments and the criminal justice data will be kept in locked cabinets. The instruments will be kept by the program for one year following the end of the project. After that year, the forms must be shredded.

Trial Runs

Since there are a variety of data sources being used in the evaluation, a test of the data collection methods was done to make sure it was feasible to get the data. Each program provided 5-10 cases for the trial run. The trial runs, described below, were successful.

Criminal Justice Data: Three of the projects are using a terminal at their local sheriff's office to access the criminal justice files. The persons using the terminal must obtain approval from the state Department of Justice in order to access the criminal justice data. These three projects obtained background clearance and were able to collect the criminal justice information on their test cases. The test cases revealed few arrests or incarceration for the test cases. Whether this is lack of criminal justice involvement will be typical of the entire sample, is impossible to say. The fourth project, San Diego, originally contracted with San Diego Association of Governments (Sandag) to collect and code the criminal justice data. Because Sandag has an established reputation for producing criminal justice history, no trial run was done. However, two years after the start of the project, San Diego was forced to cancel their contract with Sandag and make arrangements to collect the criminal justice data themselves. This meant that they have had to apply for background clearance for several project staff. This has taken time. A trial run still needs to be done for San Diego.

Physical Health Data: Test cases from each site were submitted and data collected from the Medi-Cal data set. The outside contractors were given data tapes and are in the process of mapping the data and preparing programs to analyze the data.

Mental Health Data*:* Test cases from each site were submitted and data collected from the CDS/CSI system. The outside contractors were given data tapes and are in the process of mapping the data and preparing programs to analyze the data.

CADDS Data: Test cases from each site were submitted and data collected from the ADP data system. Again, the outside contractors were given data tapes and are in the process of mapping the data and preparing programs to analyze the data.

Linking Data Sets: The independent evaluators were able to link the data from various data sets to the data for each client.

Qualitative Data

Qualitative data will be collected from all four projects. Unlike the quantitative data discussed in the sections above, qualitative data are those data that are not easily summarized in numerical form. Qualitative data can include case histories, staff perceptions, and interviews with participants. While qualitative data are not as useful in assessing impact, they are important in providing a better understanding of the individuals who are immediately affected by the programs being assessed. Their perceptions often provide a better understanding of what is actually going on in the programs, i.e., the causal processes as seen by participants. Also important is the fact that case studies can put a personal face on the numbers, reminding everyone of the human beings involved.

Three sources of qualitative data are being collected for this project. First, case studies of individual participants will be provided by all four projects. These may be the client's own written story of living with dual diagnosis or it may be a clinician's view of the client's experiences in the project. These may be success stories but project failures are also instructive. A case history from each project is included in this report, see section seven below.

A second source of qualitative data is staff surveys. Two staff surveys are planned, one has been completed and the second will be completed at the end of clinical data collection. The first survey collected information about staff background and training, especially as it relates to working with dually diagnosed clients. This survey also ask for staff perceptions of what are the most effective components in their program. Results of this survey are discussed below, see section seven. A second staff surveyed will be done in early 2001 concerning their perceptions of the utility of the core instruments in a clinical setting. This information will be used in the final report.

The third source of qualitative data will be interviews with program managers over the course of the projects. The perceptions and observations of the project managers will provide insight into the issues of integrated treatment as seen by treatment providers.

Data Analysis

The independent contractors will analyze the data and prepare reports for each project. The data analyses will start with a description of client characteristics at admission. This will include a description of clients' demographic characteristics and their status at admission on such outcome variables as mental health, substance abuse, physical health care, social functioning, etc. For categorical data, frequency tables and percentages will be presented; for continuous variables, means, and standard deviations will be presented.

The data analyses will also include a description of attrition and participation. Attrition has been high in most of the programs and it will affect the quantitative analysis of outcomes. Participation refers to whether clients agreed to participate in the research or not. Comparisons will be made (using non-parametric rank-order tests) between some large sub-groups whenever there are sufficient numbers to do so. These data will be presented in both tabular and graphic formats. Analysis of participation data will focus on whether the demographic and clinical characteristics of those who agree to participate differ from the characteristics of those who do not agree. This will provide a basis for assessing the generalization of any subsequent findings.

Analysis of outcomes, using multiple variables for each indicator, will focus on change in outcomes variables between admission and subsequent testing, e.g., 6 months, 12 months, etc. The analysis of outcomes will be measure by shifts in mean scores of a majority of clients in a positive (or negative) direction. Significance of such shifts will be assessed by parametric tests such as the analysis of variance and with categorical data, non-parametric tests such as Chi square. Change scores will only be computed for clients with usable scores at both admission and follow-up. Again, because of the attrition, analyses by subgroups will be necessary to analyze change over time.

The cost analysis will take a cost-avoidance approach focusing on selected components of the projects that can be directly evaluated for costs incurred and avoided before, during and after treatment. This approach has been used effectively in other evaluations, for example the Options for Recovery Program Evaluation sponsored by ADP (Brindis et al., 1994). The components will be the costs for physical health care, criminal justice, mental health treatment and substance abuse treatment.

IV. Descriptions of Projects

Description of Treatment Models

The treatment model outlined in the Request for Application (RFA) was very broad in its description. It emphasized that projects had to integrate services for persons with a dual diagnosis into a common system of care with one coordinated "Plan of Care" for the clients. They must be able to access needed services for the dual disorders at a single full service program rather than requiring clients to access two or more separate programs. This left the applicants flexibility in developing the details of their program models. Each of the applicants had to describe their treatment models in their proposals . The following descriptions come from the proposals and from interviews with the project directors.

Contra Costa: This project integrates the characteristics of Assertive Community Treatment model with both the social/community model and the clinical model approaches to addiction treatment and recovery. The key concepts include: 1) Developmental stages of change; 2) cognitive-behavioral skills training; 3) highly individualized treatment; 4) cross-trained staff; 5) therapeutic confrontation; 6) Bio-psycho-social approach. Developmental stages include engagement in treatment, stabilization, active treatment and relapse prevention. This model utilizes both skills training and a social support approach to recovery. This model needs staff who have education and experience in both substance abuse and mental health fields. The model requires assessments from the biological, the psychological/psychiatric and the social perspective. An approach utilizing this model takes all information into consideration when developing a treatment plan.

Merced: The treatment model for Merced takes an integrated treatment approach using a unified treatment team that offers integrated dual diagnosis services at a single site. This approach emphasizes a harm-reduction approach to treating both disorders. The model utilizes a team that includes both substance abuse counselors and mental health clinicians. All are cross-trained to deal with dually diagnosed clients. The model assumes that because persons with dual or multiple disorders suffer from serious chronic relapsing disorders, they are more likely to disengage from treatment services. This model assumes that clients will be at varying levels of readiness to engage in treatment and thus treatment must be individualized for each client. The model also assumes that clients will have varying levels of severity and disability for both their mental illness and their alcohol and drug addiction. It is assumed that many clients may continue to abuse substances in the early stages of treatment and that relapses will happen. It also assumes that individuals will at various times leave treatment services due to relapse. The program is designed to accept these individuals back into treatment, albeit at an earlier stage of treatment than when they left the program.

San Diego: The treatment model for this project is a social milieu developmental approach. This model assumes that individuals with a dual diagnoses suffer

from a variety of underlying genetic, biological and developmental vulnerabilities that may have been present at birth. Inadequate familial and societal recognition, compounded by poverty, child abuse and neglect, result in a variety of developmental disabilities. This in turn interfered with the development of stable attachment patterns, cognition, problem solving, emotional control, behavioral regulation and social judgment and placed the individual at high risk for the development of interacting DSM-IV axis I mental health and substance abuse diagnosis. These difficulties are further compounded by the disinhibiting properties of alcohol and drugs and their interference with the exercise of sound judgement. Thus this model assumes that clients have two distinct illness and both illnesses must be addressed at the same time. Both problems must be seen as co-equal. Treatment is provided at one site and staff must be cross trained in both areas. Having services at one site allows the staff to "weave" information on dual diagnosis into whatever topic they are discussing.

Santa Cruz: The treatment model for this program combines the bio-psycho-social approach with a modified therapeutic community model. A therapeutic community model assumes that everyone that works at or is a client of the program participates in the treatment team in a structured milieu. This model has a less confrontational approach than most therapeutic communities. This model requires that all staff be cross-trained and that treatment for both substance abuse and mental health problems be given at the same time. Both diagnosis are seen as primary. Assessments from biological, psychological and social areas are included in the treatment planning. This program does use 12-step groups that are receptive to dually diagnosed clients. A continuum of care is provided via transitional housing. The clients case manager will provide support and encouragement as the client graduates and moves toward independence and recovery. The model assumes that all staff dealing with the client, from entry into Paloma House to exit to independent living, are trained to deal with dual diagnosed clients.

Current Status of Each Project

The DMH and ADP program analysts assigned to this project visit each site quarterly to review the program. The project descriptions below illustrate the current status of the projects through February 2000.

Contra Costa: Contra Costa County Demonstration Project provides services to persons with a dual diagnosis, primarily through its team of three dual diagnosis specialists and interns who provide integrated mental health, substance abuse, and case management services to clients within the community. These services are provided in conjunction with the county's Intensive Community Support Teams (ICST's).

Dedicated staff for this project include the following positions:

- 1 Full Time Equivalent (FTE) Project Coordinator
- 3 FTE Dual Diagnosis Specialists (DDS) cross-trained in mental health and substance abuse disorders
- One .5 FTE Dual Diagnosis Technician to assist in data collection and in the administration of the project's core set of instruments
- One .5 FTE administrative/clerical support staff

There continues to be extensive collaboration with other agencies in the county that include Contra Costa County Health and Welfare Services; the Contra Costa County Sheriff's and Probation Departments; the County Health Department (in order to access medical assistance data for indigent persons); and local housing and dual diagnosis residential treatment programs.

The project has implemented a nine-month 40-hour per week internship program and a peer support program which are projected to enhance the program by expanding the number of clients served and making the program more cost effective. The internship program began June 14, 1999. The Project Coordinator initiated this segment of the program after strategizing on how to make the DD Demo Project both more cost effective and beneficial to clients and staff. He began by addressing chemical dependency programs at Contra Costa Community College, discussing the gap between needed services and the training necessary to appropriately serve the persistently and severely mentally ill who have substance abuse/dependence disorders. He then invited interested students to submit resumes and participate in screening interviews. Following the screening process, two interns were selected to work under the Project Coordinator and a DDS.

Since there are a number of higher functioning clients who reside independently and could provide needed support and encouragement to other clients, a Peer Support Coordinator position has been added who is responsible for weekly peer support meetings. These meetings are held to discuss issues and to provide a springboard for potential socialization activities outside the program. Six clients who completed intensive case management services training have become volunteers who will complete basic communication skills with training in active listening and complete a consumer-written curriculum.

One of the barriers encountered by the Contra Costa project has been the scarcity of affordable housing in a safe environment. Project staff continue to seek out supportive housing grants offered through the State and the federal government. Currently, project staff fully utilize Nevin House (Contra Costa County) and Bonita House (Alameda County) for residential treatment. In addition, the large four-bedroom residence in San Pablo houses graduates of the Nevin House program. It is fully utilized with six residents. This residence is privately owned and accessible to Nevin House by public transportation. Nevin House also provides continuing services for these clients.

Merced: The County of Merced provides services to persons who are dually diagnosed through an outpatient clinic located in the Marie Green Psychiatric Center. This clinic is located in a predominantly agricultural county. This dual diagnosis demonstration project occupies one-half of a new facility, which houses a locked psychiatric section on the other half of the building. The county's program involves the following five components:

- Frequent urine toxicology testing capability
- Specialized outreach, identification, and client engagement services
- An intensive three component outpatient dual diagnosis treatment program consisting of acute stabilization (crisis management and withdrawal support),

subacute stabilization (client orientation and engagement), and long term stabilization (specialized treatment and recovery support
- Special long term dual diagnosis case management services
- "Double Trouble" recovery support services and self-help support services

Program staff have found that although there are clients in all three phases of the program, the clients slip back and forth from one phase to another quite easily. Each client is treated according to the symptoms and functioning he/she presents with services being provided by culturally-competent staff.

Staff working on the project include:

- One 0.10 full time equivalent (FTE) Project Director who also serves as the county's Alcohol and Drug Program Administrator
- One 1.0 FTE Program Manager who is licensed as a Registered Nurse with a strong mental health background
- One 0.25 FTE Staff Psychiatrist
- Two 2.0 FTE Alcohol and Drug Counselors, one of whom is a Dual Diagnosis Specialist
- One 1.0 FTE Mental Heath Clinician
- One 1.0 FTE Psychiatric Staff Nurse with a strong background in mental health services and medication management
- One 1.0 FTE Medical Records Technician
- Two 2.00 FTE Mental Health Workers
- One 1.0 FTE clerical support staff

The project has identified many barriers to the provision of services and data collection in this San Joaquin Valley site.

A barrier to program implementation and data collection has been the actual data collection requirements involved in the project. Following stabilization of the client, administration or re-administration of evaluation instruments occurs in several ways, including self-administered in a group setting, or at the client's home.

The voluntary nature of the program has been a barrier to implementation. Engagement in treatment has been difficult. Recently, all clients with a dual diagnosis in Merced County are being given the message that they must be engaged in both mental health and substance abuse treatment. The anticipated hope is that this will increase referrals to the dual diagnosis program. There are 57 clients currently enrolled with the total unduplicated clients enrolled to date at 230. Although the county's proposal anticipated services to 250 individuals per year with a dual diagnosis, the county modified the figure to 100 per year due to the difficulty in engaging members of this targeted population into treatment. There have been 30 readmitted clients to the program.

Tracking clients for drug tests has been a challenge. A readily available tracking system is being developed to monitor frequency of testing and testing results. The program nurse will record the date and results in a log with a notation on the client's contact sheet.

Lack of transportation is a barrier for some clients referred to the program. This is especially true for clients who reside in outlying areas. Bus tickets have been offered and program staff provide transportation for other clients. A county minivan has been assigned to the project to assist with the transportation. The cost of transportation has exceeded the program staff's expectation.

Establishing Supplemental Security Income (SSI) for project clients had been identified as a barrier. Eligibility rates have increased. This is attributable to the staff psychiatrist documenting the extend mental health problems of clients applying for SSI.

A major theme in working with clients with a dual diagnosis is the lack of affordable stable housing. Merced County Mental Health has entered into a contract with a licensed residential recovery home for treatment of the dually diagnosed males. This arrangement provides 24-hour supervision in a clean and sober environment. Thirteen clients have entered this program and seven are still in residence there. The county continues to explore options for female clients within this county with limited linkages and resources for clients.

Attempts to comply with the Request for Proposal and requirements from ADP and DMH have resulted in changes in forms, procedures, and documentation standards. Following internal meetings within the county, implementation concerns regarding integrated services and charting have been resolved.

San Diego: The San Diego County Dual Diagnosis Demonstration Project is a three-year program, funded by the state through a federal SAMHSA grant with matching community support. The project is designed to implement and evaluate an intensive, integrated treatment model for approximately 90 clients with a dual diagnosis at a single site ("home base"). The overall goal of the program is to provide a treatment and recovery environment that offers psychiatric services, medical, psychotherapeutic, social, self-help, recovery, case management, and data collection in an integrated and collaborative manner.

In addition to the provision of standard psychopharmacological and therapeutic services, the 89 currently enrolled clients (53 percent male) are involved in a social milieu approach, with psychoeducation, skills training, recovery, and family group programs offered. A social service advocacy program assists patients in procuring needed additional services, e.g., recovery housing, and additional support for clients.

All clients enrolled in the project have a concurrent DSM-IV Axis I Mental Disorder and Axis I Substance Abuse/Dependence Disorder. Approximately 41 percent of the clients are diagnosed with a psychotic disorder, with the rest having a mood, anxiety or other disorder. Although the majority of clients have a polysubstance abuse diagnosis usually involving alcohol and marijuana or amphetamine use, alcohol is the primary substance of the clients' substance abuse/dependence disorder.

The University of California, San Diego (UCSD) Gifford Clinic is the hub of core services for these patients with a continuous treatment team of culturally-competent psychiatrists, psychologists, case managers, and community aides assigned to each client. The Gifford Clinic, which has been in operation since 1970, also serves as a major outpatient site for psychiatric residents, psychology interns, social work interns, and marriage and family counselor interns. Program staffing for dual diagnosis treatment services includes the following:

- One .6 Full Time Equivalent (FTE) Project Manage
- One .15 FTE Psychologist/Project Director
- Three 1.0 FTE Care Coordinators (Master's level mental health clinicians)
- One 1.0 FTE Community Aide Worker
- One 1.0 FTE Research Coordinator
- One .15 FTE Supervising Psychiatrist
- One .5 FTE Project Assistant
- One .10 FTE Research Director

Clients with a dual diagnosis have recurrent symptoms that include hallucinations, delusions, apathy, withdrawal, ambivalence and resistance, making engagement difficult in any treatment program. They are prone to intoxication, legal problems, violence and psychotic episodes. The clients observed in this program are faced with barriers such as the lack of affordable supported housing for persons with recovery/relapse issues; lengthy processing requirements for social security and Medi-Cal eligibility; inadequate access to medical attention; homelessness and its accompanying victimization and physical assault; easy accessibility to illicit drugs and alcohol; and the daily attempt to live a clean and sober lifestyle.

Project Care Coordinators work very closely with their respective clients to ensure that barriers are minimized and that access to needed services is available when appropriate. Project staff have made significant strides in securing the needed medical, housing, recovery and other support services for their clients through the establishment of linkages with Stepping Stone, a local alcohol and drug residential program, the St. Vincent de Paul Village, and other similar agencies.

Santa Cruz: The Santa Cruz County Dual Diagnosis Demonstration Project is designed to implement and evaluate an intensive, integrated treatment model for approximately 40 clients per year in Paloma House, the 24-hour residential treatment house. The overall goal of the program is to provide a treatment and recovery environment that offers psychiatric, medical, social, self-help, case management, and research methodologies in an integrated and collaborative manner. Santa Cruz Community Counseling Center, Incorporated, is the contract organization that operates Paloma House.

Paloma House is a 12-bed, co-ed, residential treatment facility for adults located in Watsonville, a highly agricultural town in Santa Cruz County. It receives referrals through county mental health services from crisis workers, health, clinics, the county jail discharge planner, and the alcohol and drug jail transition counselor. If detoxification is required prior to Paloma House admission, clients may be referred to a local detox center where two beds have been identified for

this project. In addition, there may be referrals from the local drug court with a mental health clinician working in conjunction with the court's alcohol and drug staff. The duration of residential treatment is 60-90 days and 60-90 days in the adjoining transitional house.

In additional to the provision of standard psychopharmacological services, the project's residential clients are involved in a social milieu approach with psychoeducation, skills training, recovery/relapse services and family group programs offered. This is a structured program of activities provided by culturally-competent staff.

A strong component of the Santa Cruz County project is supportive housing for Paloma House graduates. The Annex is the transition house and has five beds. There are also 13 beds available in housing located within walking distance of Paloma House.

Personnel for this dual diagnosis project include:

- One full-time (FTE) equivalent Residential Program Manager
- 5.04 FTE Counselors I and IIs
- 1.75 FTE Night Supervisor
- One .08 FTE Administrator
- The project has a .20 FTE Psychiatrist who is funded through the county match

From the latest quarter report available, Santa Cruz County had nine actively enrolled clients and a total of 91 the total of unduplicated clients enrolled to date.

There have been two major implementation issues. One has been has been the wait for licensure by the Department of Social Services. When that was completed, the program was able to enroll clients who are on conservatorship. The other implementation issue has been the integrated dual diagnosis care teams with Dual Diagnosis Specialists. Although the use of these specialists in coordinated care teams was mentioned in the county's proposal, the county has modified this segment of the proposal to reflect the needs of both the consumers/clients and the even distribution of work amongst the care coordinators. It became apparent that to divide case loads based solely on diagnosis would create a disproportionate number of clients for the dual diagnosis specialists to serve. Therefore, Santa Cruz County has trained two team members to be the "designated dual diagnosis specialists" as specified in the grant. These specialists work as "consultants" for the team when issues arise pertaining to any substance abuse clients. This is more in line with a multi-disciplinary team approach.

Linkages between Paloma House and other community organizations and service providers appear strong. These include the local drug court and Community Support Services that possess 105 beds throughout the county for supportive housing. Career Services, an organization that coordinates service between the local mental health department and the Department of Rehabilitation, is a strong link in the community with Paloma House. Other connections in the community are the Mental Health Client Network and the Housing and Urban Development's Exito housing projects. Probation officers

and parole agents are also involved in a strong local network of collaboration, information, and referral.

V. DEMOGRAPHIC DATA

Overview of Demographic Characteristics of Clients

The demographic characteristics of the clients vary between the projects, which is not too surprising since each of the programs is located in a different part of the state and in a different setting. Two of the projects are in urban areas, the Contra Costa project in the San Francisco Bay area and the San Diego program in downtown San Diego. The Merced project is located in the rural, agricultural county of Merced, although the project itself is located in the town of Merced. However, many of their clients come from the outlying small farming communities scattered around the county. The Santa Cruz project is located in predominately Hispanic community of Watsonville, although clients came from all over the county. Santa Cruz County is a small, rural, agricultural county but it is on the fringe of Silicon Valley, a very wealthy urban area. It shares characteristics of both a small rural county as well as urban area. The demographic profile of each of the projects is described below. This information is collected by the projects at the time of admission. It reflects the characteristics of those clients who agree to participate in the study. Not all clients agreed to participate in the evaluation. Those that refuse receive the same treatment as evaluation participants. The descriptions below will focus on the evaluation participants. For comparison purposes, there will be a brief description of the demographic characteristics of non participants in each county. Tables with demographic data for the non participants can be found in Appendix A.

The projects are similar in that they serve more males than females. Santa Cruz has the fewest females in their program and San Diego has the most. This may reflect the fact that men in California have a statistically significant higher prevalence rate of substance abuse (Holtby, Witbrodt, & Zahnd, 1999). The projects are not representative of the racial/ethnic composition of the counties in which they are located, but are somewhat similar to the ethnic/racial composition of clients seeking mental health services in each county. Most of the projects are also somewhat similar to the ethnic/racial composition of participants seeking substance abuse treatment.

Most of the clients served in the projects are diagnosed with a schizophrenic or mood disorders. The projects' clients differed somewhat in their substance abuse problems. Two of the projects report that their clients most frequent drug problem is alcohol, one project report polydrug use as the most frequent, and one reports cocaine as the most frequently used drug. It should be noted that alcohol is noted as a problem at all sites, either as the most frequent or the second most frequent substance abused. Subgroup differences by gender and diagnosis will be examined in the final report.

In addition to basic demographic data, all four programs collected additional background information on clients. Because the evaluation design had already required six instruments to be completed every six months for all clients, the evaluation design did not specify the types of intake information to be collected. Therefore, the programs do not collect the same information and often used different sources. However, this background information provides useful

information on clients and is presented on Tables labeled “Background Data.” Since the data may come from different sources, the data may not be comparable between the programs.

All four programs report data on their intake forms concerning involvement in the criminal justice system. These data are not from the same source, they may come from the intake records or may be self reported or may be clinician report. The time frame for this intake information varies. Some of it may refer to recent events, some of it may refer to lifetime occurrence. Three of the projects reported that less than half of their clients had any involvement in the criminal justice system. One report that 35% of their clients have never been in jail or prison but 51% of their clients had been “picked up or arrested” for alcohol or drug offenses. Involvement usually means an arrest and any subsequent disposition but for San Diego, involvement could mean being picked up but not charged. Two of the projects report that approximately a third of their clients had criminal justice involvement. One program, the Santa Cruz project, have 43.9% of their clients, at the time of admission, involved in the criminal justice system. For the final report, a more reliable assessment of criminal justice involvement will be the use of official arrest records.

The vast majority of clients who report an arrest experienced only one arrest. The fact that less than half of the dually diagnosed clients have an arrest history is an interesting, albeit preliminary, finding because the expectation at the beginning of these projects was that the dual diagnosed population would be heavily involved in the criminal justice system as offenders. Certainly, previous studies have suggested that dually diagnosed individuals are disproportionately represented among incarcerated population (Abram & Teplin, 1991; Holcomb & Ahr, 1988; Teplin, 1984; Teplin, 1990). A prevalence rate of a third is roughly comparable to the findings of the few other studies that have looked at criminal justice involvement of dually diagnosed clients (Clark, Ricketts, & McHugo, 1999; Holcomb & Ahr, 1988). To know whether this prevalence rate of approximately 33% is high, it is necessary to have some basis for comparison, e.g., a general prevalence of arrest rate for the population of California as a whole, or of some meaningful subset of that population. The California Department of Justice was able to provide one study that provides some basis for comparison. That study reported that approximately one third of a sample of young males in California had experienced an arrest by age 28 (Tillman, 1987). Tillman’s study did not include women, who typically have a much lower prevalence rate than men and over 40% of the dual diagnosis projects’ clients are women. To understand the significance of this prevalence rate it would be helpful to have an arrest prevalence rate for a comparable population. This issue is one that will be addressed more closely in the final report. It must be noted that the proportions reported here are based on data collected at intake. For consistency and reliability, the final report will use official arrest histories for client participants. It may be, as one study has found, that while the proportion of dually diagnosed clients arrested is smaller than expected, that small proportion are frequent consumers of criminal justice services and generate large costs for the criminal justice system (Jerrell & Hu, 1996). The use of official arrest history information in the final report will provide a more reliable and consistent set of data upon which to evaluation the criminal activity of dually diagnosed clients.

Contra Costa

The "typical" client in the Contra Costa program is an African American male in his thirties, with a mental health diagnosis of schizophrenia and a problem with cocaine abuse/dependence. Typically, he has agreed to participate in the program evaluation.

As Table 4.1 shows, 59% of the Contra Costa clients participating in the research are male. Clients range in age from under 20 to over 49 years of age. Almost half are African American (47%). While this is consistent with the ethnic makeup of the community in which the program is located, it is not representative of the county as a whole. In Contra Costa County, African Americans comprise just 9% of the county population, whites comprise 66% and Hispanics 7%, the last two larger than their proportions in the program (California, 1999b). The demographic profile of clients seeking mental health services in Contra Costa county is also different from the project, with 54% of those seeking mental health services being white, 11% being Hispanic, 24% being black (California, 1997). It also differs from the racial/ethnic profile of participants in substance abuse treatment in Contra Costa (California, 1999a). In both of these cases, the project clients are disproportionately black and Hispanics are underrepresented.

The primary mental health diagnosis is schizophrenia, followed by depressive disorders and bipolar disorders. The primary substance abused is cocaine, used by 34%, and Alcohol, used by 29%. Poly drug use was reported by almost one sixth of the clients. See Table 4.1.

Table 4.1 Client Demographic Profile
Contra Costa Project
N=59

Gender	#	%
Female	24	41
Male	35	59
Total	59	100
Age		
Under 20	1	2
20 to 29	12	20
30 to 39	23	39
40 to 49	13	22
Above 49	5	8
Unknown	5	8
Total	59	100

Table 4.1 Client Demographic Profile
Contra Costa Project
N=59

Race/Ethnicity		
African American	28	47
White	18	31
Hispanic	4	7
Southeast Asian	3	5
Other Asian	3	5
Other	2	3
American Indian	1	2
Total	59	100
Primary Mental Health Diagnosis		
Schizophrenia	28	47
Psychotic Disorder NOS	3	5
Depressive Disorders	16	27
Bipolar Disorders	9	15
Other	3	5
Total	59	100
Primary Substance-Related Diagnosis		
Cocaine Abuse/Dependence	20	34
Alcohol Abuse/Dependence	17	29
Polysubstance Abuse/Dependence	10	17
Amphetamines Abuse/Dependence	7	12

Table 4.1 Client Demographic Profile
Contra Costa Project
N=59

Opioid Abuse/Dependence	2	3
Other	2	3
Cannabis Abuse/Dependence	1	2
Total	59	100

Not all clients chose to participate in the evaluation. Twenty clients declined to participate, out of a total of 79, a non participation rate of 26%. One concern in an evaluation is that clients who decline are demographically distinct from the participating clients. The “typical” non participant is an African American male in his forties (a little older than the participants), with a diagnosis of schizophrenia and cocaine abuse/dependence. See Table A-1, in Appendix A. Except for

being older, the non participants are very similar to the participants in demographic characteristics.

The way in which a client finds her way to the project is reported at intake as "Referral Source." As Table 4.2 shows, clients were most likely to be referred by a county crises center (32%) or the county outpatient clinic (27%). Eight percent were referred by the jail and 3% by the county drug court.

Interestingly, more than two thirds of the Contra Costa clients reported, at admission, no criminal justice involvement. The remaining 32% were either on probation, parole, incarcerated, or diverted from court, see Table 4.2.

Income from three-fourths of the participating clients was from federal government SSI funds. Twelve percent reported no sources of income, 7% collected disability and 5% reported "other."

At the time of admission, more than a third of the clients lived in a board & care facility with supervision, see Table 4.2. Twenty-seven percent were living in a private house or apartment. At the time of admission, 19% were hospitalized, 6% were homeless or in a shelter, and the remaining were either in a cooperative apartment or in a transitional group home.

Table 4.2 Background Data for Contra Costa Project Clients N=59

Referral Source	#	%
West County Crisis Center (24th St.)	19	32
West County Adult Outpatient Clinic (38th St.)	16	27
Co. Co. Regional Medical Center	11	19
Other	6	10
Martinez Detention Facility	5	8
STAR Drug Court	2	3
Total	59	100
Criminal Justice Involvement		
No Criminal Justice Involvement	40	68
On Probation	11	19
Incarcerated	4	7
Admitted under Diversion from any Court	2	3
Under Parole Supervision by CDC	1	2
Unknown	1	2
Total	59	100

Source of Income		
SSI	45	76
None	7	12
Disability Insurance	4	7
Other	3	5
Total	59	100
Living Arrangements		
Board & Care Home (with supervision)	21	36
Private House or Apartment	16	27
Hospital	11	19
Jail	3	5
Cooperative Apartment	3	5
No Current Residence	2	3
Shelter	2	3
Transitional group home	1	2
Total	59	100

Merced

The "typical" client in the Merced project is a white male in his thirties, with problems with depression and alcohol. He has agreed to participate in the program evaluation.

As Table 4.3 shows, Merced clients range in age from under 20 (2 clients) to above 49 (11 clients). The majority of participating clients are white (62.9%) and roughly one quarter are Hispanic. African Americans comprise 11.9%. This is not representative of the Merced County population, where whites comprise 49% of the county population and Hispanic's 36%. African Americans comprise just 4% of the county population (California, 1999b). It is not comparable to the demographics of clients seeking mental health services in Merced county either. In Merced county, 51% of those seeking mental health services are white, 27% are Hispanic, and 9% are African American (California, 1997). The racial/ethnic profile of the demonstration project is somewhat similar to the profile of individuals seeking substance abuse treatment in Merced County, Hispanics comprise 35% of those participating in substance abuse treatment in Merced County, Whites comprise 51% and African Americans 10% of substance abuse treatment participants (California, 1999a).

The most frequent mental health diagnosis for Merced clients is depressive disorders, (31%), followed by psychotic disorders (19%) and bipolar disorders (18%), see Table 4.3.

The primary substance-related diagnosis for these clients is alcohol abuse/dependence (37%), followed by polysubstance abuse/dependence (28%), and amphetamines abuse/dependence (see Table 4.3).

Table 4.3 Client Demographic Profile
Merced Project
N=210

Gender	#	%
Males	118	56.2
Females	92	43.8
Total	210	100
Age		
Under 20	2	.1
20 to 29	43	20.5
30 to 39	98	46.7
40 to 49	55	26.2
Above 49	11	5.2
Unknown	1	.5
Total	210	100
Race/Ethnicity		
White	132	62.9
Hispanic	52	24.8
African American	25	11.9
Other	1	0.5
Total	210	100
Primary Mental Health Diagnosis		
Depressive Disorders	65	31
Psychotic Disorder NOS	39	19
Bipolar Disorders	38	18
Schizophrenia	30	14
Adjustment Disorder	8	3.8
Mood Disorder	9	4.3
Posttraumatic Stress Disorder	3	1.4
Obsessive-Compulsive Disorder	3	1.4
Other	12	5.7
Unknown	3	1.4
Total	210	100
Primary Substance-Related Diagnosis		
Alcohol Abuse/Dependence	76	36

Polysubstance Abuse/Dependence	58	28
Amphetamines Abuse/Dependence	34	16
Cocaine Abuse/Dependence	14	6.7
Opioid Abuse/Dependence	12	5.7
Cannabis Abuse/Dependence	10	4.8
Other	3	1.4
Unknown	3	1.4
Total	210	100

Thirty-six clients refused to participate in the evaluation, out of a total of 228, a nonparticipation rate of 8%. The "typical" non participant in the Merced project is a white male in his 40s diagnosed with a psychotic disorder and alcohol or polysubstance abuse/dependence. These clients differ from the participants in being older and in having a psychotic disorder. See Table A-2 in Appendix A, for non participant's demographic characteristics.

Clients in Merced are most frequently referred by Merced County Mental Health (Merced Adult team, 65.7%). Other frequent referral sources include a county Psychiatric Center (11.9%) and Cal Works (9.0%). See Table 4.4.

Three fourths of the clients did not report any criminal justice involvement when they were admitted to the program. A fifth of the sample reported being on probation or parole, see Table 4.4.

More than a quarter report having no income. The most frequent sources of income were SSI (27.7%), or other public assistance (18.5%). More than half live in a private house or apartment, a fifth live with relatives, and the rest live in boarding houses, homeless shelters, etc. See Table 4.4.

Table 4.4 Background Data for
Merced Project Clients
N=210

Referral Source	#	%
Merced Adult Team	44	21.0
Marie Green Psychiatric Center	8	3.8
CAL Works	6	2.9
Merced Alcohol & Drug Center	4	1.9
Crisis Stabilization Unit (CSU)	1	.5
Livingston Outpatient Clinic	2	1.0
Other	2	1.0
Referral Source (cont'd)	#	%
Unknown	143	68.1
Total	210	100
Criminal Justice Involvement		

No Criminal Justice Involvement	50	23.8
On Probation	10	4.8
Under Parole Supervision by CDC	3	1.4
Admitted under Diversion from any Court	2	1.0
Unknown	145	69
Total	210	100
Source of Income		
SSI	18	8.6
None	17	8.1
Other Public Assistance	12	5.7
Disability Insurance	5	2.4
Salary	4	1.9
Other (includes retirement income)	3	1.4
Unemployment Insurance	3	1.4
Self-Employed	1	.5
Illegal Activities	1	.5
Relatives	1	.5%
Unknown	145	69
Total	210	100
Living Arrangements		
Private House or Apartment	39	18.6
Relatives	14	6.7
Transitional Supportive Housing	5	2.4
Boarding House	5	2.4
Shelter	4	1.9
Non-Relatives/Friends	1	.5
Rooming or Boarding House or Hotel	1	.5
Homeless	1	.5
Unknown	140	66.7
Total	210	100

San Diego

The “typical” client in the San Diego project is a white male in his late thirties with a diagnosis of schizophrenia and alcohol abuse. He has agreed to participate in the study. This profile is seen in Table 4.7.

Women comprise almost 47% of the clients, a somewhat higher proportion than in the other three projects (roughly 43%). San Diego clients range in age from under 20 (3) to above 49 (15), with the largest percentage being in their 30s.

Whites comprise 68% of the participating clients, African Americans 4% and Hispanics comprise 10%, see Table 4.5. Hispanics are underrepresented in the project since they comprise 24% of San Diego county's population, while African Americans comprise 6% and whites comprise 61% (California, 1999b). By comparison, only 2.8% of the clients seeking mental health services in San Diego are Hispanic, while 71% are white and 15% are African-American (California, 1997). The project demographics are not similar to the demographic profile of individuals seeking substance abuse treatment in San Diego county because 25% of those seeking substance abuse treatment are Hispanic, while whites comprise 55% and African Americans 15% (California, 1999a).

The most frequent mental health diagnosis is schizophrenia, followed by depressive disorders. Alcohol was the most frequent drug problem for San Diego clients, followed by amphetamine abuse, see Table 4.5. Methamphetamine is a popular drug in San Diego, in fact San Diego has the highest methamphetamine rate among arrestees of any city tested as part of the Arrestee Drug Abuse Monitoring Program (NIJ, 1999).

Table 4.5 Client Demographic Profile
San Diego Project
N=152

Gender	#	%
Female	72	47
Male	80	53
Total	152	100
Age		
Under 20	3	1.9
20 to 29	31	20.4
30 to 39	52	34.2
40 to 49	39	25.7
Above 49	15	9.9
Unknown	12	7.9
Total	152	100
Race/Ethnicity		
White	103	68
Race/Ethnicity (cont'd)		
Hispanic	15	10
Other	11	7
African American	12	8
American Indian	6	4
Asian	5	3
Total	152	100

Primary Mental Health Diagnosis		
Schizophrenia	32	21
Bipolar Disorders	21	14
Depressive Disorders	29	19
Psychotic Disorder NOS	5	3
Anxiety Disorders	15	10
Personality Disorders	11	7
Unknown	39	26
Total	152	100
Primary Substance-Related Diagnosis		
Polysubstance Abuse/Dependence	13	9
Alcohol Abuse/Dependence	50	33
Cannabis Abuse/Dependence	5	3
Cocaine Abuse/Dependence	15	10
Amphetamines Abuse/Dependence	23	15
Opiod Abuse/Dependence	5	3
Other	2	1
Unknown	39	26
Total	152	100

San Diego is unique in having no clients refuse to participate in the evaluation. The program presented the assessment instruments as part of the treatment packages and convinced clients of the value of completing the evaluation forms.

Information on referral source is not collected by the San Diego program. Fourteen percent of the San Diego clients report being arrested In the 6 months prior to admission to the program. Over a third have never been in jail see Table 4.6.

Fourteen percent report spending time in jail in the last six month and thirty-five percent claim they have never spent time in jail. Eighty percent of the San Diego clients had been homeless at some time during their life. At the time of admission to dual diagnosis project, the majority of San Diego Clients were living in private houses or apartments, see Table 4.6 below. The second most frequent living arrangement is to reside in a treatment program or halfway house. While only 12% were homeless when admitted to the Dual Diagnosis project, 80% had been homeless at some point in their lives.

More than half of the clients have never married. At the time of admission to the project, only 9 clients were married, see Table 4.6.

Table 4.6 Background Data for
San Diego Project Clients
N=152

Jailed in the last 6 months?	#	%
Yes	21	14
No	131	86
Longest Jail stay? (Lifetime)	#	%
None	53	35
Less than 1 day	17	11
Days	36	24
Weeks	11	7
Months	24	16
Years	11	7
Total	152	100
Ever Homeless?		
Yes	122	80
No	30	20
Total	152	100
Living Arrangements		
House/apartment w/mental health visitor	11	7
Shelter/homeless	18	12
Private House or Apartment	91	60
Treatment program/Halfway House	27	18
Skilled Nursing Facility	5	3
Total	152	100
Marital Status		
Married	9	6
Divorced	44	29
Separated	17	11
Never Married	79	52
Widowed	3	2
Total	152	100

Santa Cruz

The “typical” client in the Santa Cruz residential treatment program is a white male in his thirties, with a diagnosis of schizophrenia and polysubstance abuse/dependence or alcohol abuse/dependence. He has agreed to participate

in the evaluation. This profile can be seen in the demographic data on participating clients on Table 4.7.

Almost three fourths of the participating clients are male (72.7%). Clients range in age from under 20 (1 client) to over 49 (4 clients). The majority are in their thirties or forties.

White clients comprised over three fourths of the individuals in the project, while 9.3% of the clients are Hispanic and 7.4% are reported as "other." See Table 4.7. Hispanics are underrepresented in the programs since they comprise 23% of Santa Cruz County's population, while whites are slightly over represented, they comprise 71% of the county populations. African Americans and Native Americans are slightly over represented in the project (California, 1999b). The project 's racial/ethnic composition is also different from the racial/ethnic characteristics of clients who seek mental health services and substance abuse services in Santa Cruz County, where 75% of the individuals seeking mental health services are white and 18% are Hispanic (California, 1995). Over 63% of individuals seeking substance abuse treatment in Santa Cruz County are white, 31% are Hispanic and 3% are African American (California, 1999a).

Over two thirds of the clients participating in the evaluation have a diagnosis at admission of schizophrenia. The second most frequent diagnosis is bipolar disorders, see Table 4.7.

The most frequently reported substance problems were polysubstance abuse/dependence and alcohol dependence (37.0% and 35.2% respectively). See Table 4.7.

Table 4.7Client Demographic Profile
Santa Cruz Project
N=57

Gender	#	%
Female	15	26.3
Male	40	70.2
Unknown	2	3.5
Total	57	100
Age		
Under 20	1	1.8
20 to 29	7	12.3
30 to 39	27	47.4
40 to 49	16	28.1
Above 49	4	7.0
Age (cont'd)		
Unknown	2	3.5
Total	57	100
Race/Ethnicity		

White	42	73.7
Hispanic	5	8.8
Other	4	7.0
African American	2	3.5
American Indian	1	1.8
Unknown	3	5.3
Total	57	100
Primary Mental Health Diagnosis		
Schizophrenia	37	64.9
Bipolar Disorders	15	26.3
Depressive Disorders	2	3.5
Psychotic Disorder NOS	1	1.8
Unknown	2	3.5
Total	57	100
Primary Substance-Related Diagnosis		
Polysubstance Abuse/Dependence	20	35.1
Alcohol Abuse/Dependence	19	33.3
Cannabis Abuse/Dependence	6	10.5
Cocaine Abuse/Dependence	3	5.3
Amphetamines Abuse/Dependence	2	3.5
Opiod Abuse/Dependence	2	3.5
Other	2	3.5
Unknown	3	5.3
Total	57	100

More than three fourths of the clients admitted to the Santa Cruz project agreed to participate in the evaluation. Seventeen clients refused, a refusal rate of 22.9%. The “typical” non participant is a white male in his thirties or forties, with a diagnosis of schizophrenia and Polysubstance abuse. Except for being somewhat older, this group is very similar to the participating clients. See Table A-3 in Appendix A.

The source of referral for clients to the Santa Cruz projects is not collected by the project so it is not available.

A majority of the clients reported no criminal justice involvement (56.3%), although 31.3% were on probation at the time of admission, see Table 4.8. Data are missing for 71 percent of the cases

Most of the clients participating in the evaluation reported their source of income to be SSI, see Table 4.8. Almost 12% reported “Other.” Data are missing for 40 cases (70 percent).

At the time of admission to the Santa Cruz residential treatment program, the most frequent living arrangement was in a Cooperative Apartment (18.8%), followed by living in a homeless shelter (12.5%), or living in a private house or apartment (12.5%). See Table 4.6. Again, data are missing for 72% of the clients.

Table 4.8 Background Data for Santa Cruz Project Clients N=57

Criminal Justice Involvement	#	%
No Criminal Justice Involvement	9	56.3
On Probation	5	31.3
Admitted under Diversion from any Court	1	6.3
Under Parole Supervision by CDC	1	6.3
Unknown	41	n/a
Total	57	100
Source of Income		
SSI	15	88.2
Other	2	11.8
Unknown	40	n/a
Total	57	100
Living Arrangements		
Cooperative Apartment	3	18.8
Shelter	2	12.5
Private House or Apartment	2	12.5
Transitional Group Home	1	6.3
Skilled Nursing Facility	1	6.3
Intermediate Care Facility	1	6.3
Jail	1	6.3
Other	5	31.3
Unknown	41	n/a
Total	57	100

VI. CLINICAL DATA

Overview of Clinical Data

The clinical data collected at admission to the projects provide the base line for assessing changes in the clients while they are in the dual diagnosis programs. The assessment instruments discussed earlier are administered to the clients at admission and every six months thereafter. In this report the frequencies or averages of scores at admission are described. Analyses of outcome data will be provided in the final project report.

Data collected thus far from the five instruments administered at admission, indicate broad similarities in clients' responses from all four projects. These broad similarities are discussed below, followed by county-specific descriptions.

The Kennedy Axis 5 is designed to capture the clinician's impression of the client's level of functioning in 6 areas: medical impairment, dangerousness/violence, social skills, occupational skills, psychological impairment, and substance abuse. The client scores at all four projects were fairly similar on the K Axis. Psychological functioning is the area of lowest functioning for clients at two of the sites, while substance abuse is the lowest at one site, and at the fourth site substance abuse ties with psychological problems as the lowest functioning area. It is worth noting that the two lowest areas of functioning at all four sites are psychological impairment and substance abuse.

The California Quality of Life is a client-completed form which asks the client to rate her level of satisfaction in several areas of her life. It produces two types of ratings: one for subjective ratings (based on the client's own perceptions) and one for objective items (based on counts of categorical responses). On the subjective ratings, clients at all four sites report the least satisfaction with their finances and the most satisfaction with their safety. When looked at more closely, clients at all four sites report adequate money for food. At three of the sites clients report not enough money for clothing, housing, travel, etc. Clients at all four sites report, for the most part, mixed feelings of satisfaction with the other aspects of their lives. At all four sites roughly a quarter of the clients reported being a crime victim within the past month, and at three of the sites, roughly a quarter report having been arrested or picked up by the police in the previous month.

One of the more puzzling findings involves the scores on the *Addiction Severity Index.* The ASI is a structured clinical interview that produces a set of measures of client functioning, including scores for alcohol use, legal status, employment status, drug use, legal status, family/social relationships and psychiatric status. It was chosen for this study to be one of the main measures of change in substance abuse since it is widely used. At all four site, the average response for drug and alcohol problems was very low, indicating little to no problems in these areas. These low scores are consistent and very similar across all four projects. It was expected that the scores would be high, in the severe range. The outside evaluators doubled checked their calculations and the state evaluators consulted with subject matter expects. One possible explanation came from Dr. Yih-ing Hser, at the UCLA Drug Abuse Research Center. She

suggested that the timeframe of the questions in the ASI, which are weighted towards drug use in the last 30 days, may have limited the responses to the period after admission to the Dual Diagnosis projects (Y. Hser, personal communication, March 7, 2000). As noted in the description of the evaluation methodology (see page 8), the staff have six weeks in which to collect the admission data, and if the clients were interviewed for the ASI at the end of the six weeks, they may have reduced or stopped their substance abuse during that period.

A second hypothesis, from one of the outside evaluators, is that the responses reflect the denial common to alcohol and drug users. It was also suggested that self-report forms are not suitable for dually diagnosed clients (I. Imam, personal communication, March 3, 2000). A number of studies have noted that self-reports yield inadequate information for dually diagnosed clients (Drake, Mercer-McFadden, Mueser, McHugo, & Bond, 1998; Galletly, Field, & Prior, 1993). Another possible explanation is that because the ASI has not been normed on psychiatrically ill substance abusers, it may not be a good instrument to use with this population (NIDA, 1993). This is one area that will be examined more closely in the final report.

Another interesting result concerns the scores on the ASI scale for legal status. The scores are low for all four sites, but at three of the sites, the standard deviations for these scores are larger than the average score (the mean), which suggests there is a lot variation in the data. This might indicate that there is a distinct subgroup with extreme scores, perhaps one more actively involved in the criminal justice system than most of the clients. At the fourth site, the average and the standard deviation are the same. This phenomenon will be examined more closely in the final analyses.

The Behavior and Symptom Identification Scale (BASIS-32) is another client-completed form that provides rating of client functioning. At all four sites, the average client gave himself a positive rating (meaning little to no difficulty) in several areas, with the most positive ratings (indicating no difficulty) on the two scales that measure psychosis and impulsive/addictive difficulties. At all four sites, the area with the most difficulty in functioning was depression/anxiety. At three of the sites, relations with others tied depression/anxiety with low functioning scores. The positive ratings in the areas of psychosis and addictive/impulsiveness may be explained by some of the same reasons advanced regarding the ASI (e.g., denial, poor instrument for this population) may apply to the BASIS-32 as well.

The SF-12 broadly measures mental and physical health. It is a client completed form. At these sites clients give themselves relatively high scores for physical and mental health. At the fourth site, scores were much lower for both measures. Interestingly, at all sites mental health was rated lower (less healthy) than physical health.

Contra Costa

At admission, the average client in the Contra Costa program is having major to serious problems functioning in many areas of her life, as measured by the K

Axis. The K Axis is designed to capture the clinician's impression of the client's level of functioning in six areas including medical impairment, dangerousness/violence, social skills, occupational skills, psychological impairment and substance abuse. As table 5.1 shows, most of the scores on the K Axis sub-scales are in the 50s, indicating serious problems functioning in each of these areas. For example, clients in the Contra Costa program average 45.8 points on psychological impairment, a rating indicating major impairment in this area. The two lowest functioning areas are in psychological impairment and substance abuse. The highest level of functioning is in the medical impairment area where the average score of 66.2 indicates moderate physical impairment.

Table 5.1 Kennedy Sub-Scale Scores
At Admission Contra Costa

Sub-Scale Item	Mean	Standard Deviation
Psychological Impairment	45.9	11.3
Social Skills	57.0	9.9
Violence	53.8	13.7
ADL-Occupational Skills	57.6	12.3
Substance Abuse	52.8	12.2
Medical Impairment	66.2	12.6

K Axis Scoring Codes: 100=Superior; 90=good skills; 80=slight impairment; 70=mild difficulties; 60=moderate difficulties; 50=serious impairment; 40=major impairment; 30=considerable problems; 20=major problems functioning; 10=chronic problems

The clients' perspective on their quality of life at the time of admission suggests that the average client in the Contra Costa program has mixed feelings about how satisfied he is in different areas of his life. The CA-QOL is completed by the clients and it asks them to rate their quality of life in a variety of areas. It produces two types of ratings: one for subjective items (based on client's own perceptions), and one for objective items (based on counts of categorical responses). As Table 5.2 shows, for subjective scale items, the average client reports mixed feelings of satisfaction about the quality of his life. In the areas of finances and health, the average score falls into the mostly dissatisfied range. The highest scores on satisfaction are in leisure activities and safety, which fall into the area of "mixed" feelings of satisfaction, see Table 5.2.

Table 5.2 Subjective Scores Of The California Quality Of Life
At Admission Contra Costa

Subjective Scales	Mean	Scale Codes
General Life Satisfaction	4.2	
Satisfaction with Living Situation	4.0	1=Terrible
Satisfaction with Leisure Activities	4.7	2=Unhappy
Satisfaction with Daily Activities	4.2	3=Mostly Dissatisfied
Satisfaction with Family Relationships	4.6	4=Mixed
Satisfaction with Social Relations	4.5	5=Mostly Satisfied
Satisfaction with Finances	3.1	6=Pleased
Satisfaction with Safety	4.7	7=Delighted
Satisfaction with Health	3.7	

On the objective scales, three types of scores are reported: percentages for a range of responses, averages, and yes/no responses. These are presented on four separate tables below. Phone calls with family occur monthly or more often for just over half of the Contra Costa clients, see Table 5.3-A. Just under half of the clients have no phone contacts with family at all. Visits with family members occur at least monthly, if not more often for almost two thirds of the clients, see table 5.3A.

Table 5.3-A CA-QOL Objective Scale Scores on Family Items At Admission Contra Costa

Family Objective Scale Items	Numbers	Percent
Frequency of Family contacts by phone:		
At least once a day	1	2.3
At least once a week	12	27.3
At least once a month	10	22.7
Less than once a month	4	9.1
Not at all	11	25.0
No Family	6	13.6
Total	44	100
Frequency of getting together with a family member?		
At least once a day	1	2.3
At least once a week	7	15.9
At least once a month	15	34.1
Less than once a month	11	25.0
Not at all	7	15.9
No Family	3	6.8
Total	44	100

Of those responding, almost two thirds of the Contra Costa clients report visiting with non roommate friends at least once a week, if not more often, but more than one quarter report no visits with friends, see Table 5.3B. Note than responses are missing for half of the clients. Planned social activities with a friend happen at least once a month, if not more often for 40.9% of the clients responding to this question, see Table 5.3-B. Again, data are missing for half the cases.

A third of the Contra Costa clients report spending time each day with a spouse/boyfriend/girlfriend. Almost one third report spending no time with such a person, see Table 5.3-B.

Table 5.3-B CA-QOL Objective Scale Scores on Social Relations At Admission Contra Costa

Social Skills Objective Scale Items	Numbers	Percent
How often do you visit with someone who does not live with you?		
At least once a day	12	22.7
At least once a week	10	40.9
At least once a month	7	9.0
Less than once a month	5	0.0
Not at all	10	27.3
Total	22	100
No Response/missing	22	-
How often do you telephone someone who does not live with you?		
At least once a day	5	11.4
At least once a week	9	20.5
At least once a month	2	4.5
Less than once a month	0	0.0
Not at all	6	13.6
No Response	22	50.0
Totals	44	100
Do something with another person that you planned ahead of time?		
At least once a day	3	6.8
At least once a week	6	13.6
At least once a month	5	11.4
Less than once a month	2	4.5
Not at all	6	13.6
No Response	22	50.0
Total	44	100
How often do you spend time with someone you consider more than a friend, like a spouse, a boyfriend or a girlfriend?		
At least once a day	14	31.8

Social Skills Objective Scale Items	Numbers	Percent
At least once a week	4	9.1
At least once a month	7	15.9
Less than once a month	6	13.6
Not at all	13	29.5
No Response	0	0
Total	44	100

Clients average approximately $76 dollars of spending money each month. They consider their general health status to be only fair, see table 5.3-C.

Table 5.3-C CA-QOL Objective Scale Scores for Money and Health At Admission Contra Costa

Objective Scale Items	Average Score	Scoring Codes
Amount of Spending $$	$76	1 = Less than $25 a month 3 = $51 to $75 a month 5 = More than $100 a month
General Health Status	4.0	1 = Excellent 3 = Good 5 = Poor

There is adequate money for food for most of the clients in the Contra Costa project (almost 90%), but less than a third of the clients report enough money for clothing, housing, travel or social activities in the month previous to admission, see table 5.3-D. Unfortunately, approximately 25% report being a victim of a violent crime within the last month, while 22% report being a victim of a non violent crime. This seemingly high rate of victimization is consistent with other studies that report high victimization rates for dually diagnosed clients (Clark et al., 1999; Drake, Osher, & Wallach, 1991). A quarter of the clients report being arrested or picked up by the police within the previous month.

Table 5.3-D CA-QOL Objective Scale Scores At Admission Contra Costa (Table includes 1st time admissions only)

Objective Scales (ratings for past month)	YES #	NO #	YES %	NO %
Adequate Money for Food	36	5	87.8	12.2
Adequate money for Clothing	10	31	24.4	75.6
Adequate money for Housing	13	28	31.7	68.3
Adequate money for Local Travel	12	29	29.3	70.7
Adequate money for Social Activities	13	28	31.7	68.3
Victim of Violent Crime	10	31	24.4	75.6

Objective Scales (ratings for past month)	YES	NO	YES	NO
Victim of Nonviolent Crime	9	32	22.0	78.0
Arrested?	10	31	24.4	75.6

The Addiction Severity Index provides another set of measures of client functioning. The average scores for Contra Costa clients reveal problems in the areas of employment and psychiatric functioning, see Table 5.4. Interestingly, the clients score best (i.e., reported least severe problems) in the areas of substance abuse. Possible explanations are discussed above, in the Overview to this section (see page 36). These two items also had the lowest standard deviations of the scale items, suggesting little variation in scores. Although the scores suggest better functioning than the K Axis, the ASI responses are based on client interviews while responses to the K Axis are clinician ratings of client. Thus, the scores reflect two different perspectives. Hopefully, both scores will show improvement in clients over time.

Table 5.4 Addiction Severity Index Sub-Scales Scores
At Admission Contra Costa
(Table includes 1st time admission only)

Sub-Scale Categories	Average Score	Standard Deviation
Medical Status	0.4	0.4
Employment Status	0.9	0.2
Alcohol Use	0.1	0.1
Drug Use	0.1	0.1
Legal Status	0.1	0.2
Family/ Social Relationships	0.3	0.2
Psychiatric Status	0.5	0.3

ASI Scoring codes:
Least severe 0 .1 .2 .3 .4 .5 .6 .7 .8 .9 1 Most severe

Another set of measures of client functioning comes from the self-rating form The Behavior and Symptom Identification Scale (Basis-32). As Table 5.5 below shows, the average scores suggest little to moderate problems with relationships with self/others, with depression/anxiety, and in daily living. Clients rate themselves as having a little difficulty with impulsive/addictive behaviors and psychosis.

Table 5.5 Behavior And Symptom Identification Scale (BASIS-32)
At Admission Contra Costa
(Table includes 1st time admissions only)

Sub-Scale Categories: Area of Difficulty	Average Level of Difficulty*	Scoring Codes
Relation to Self/Others	1.5	0=no difficulty
Depression/Anxiety	1.5	1=a little
Daily Living Skills	1.5	2=moderate

Sub-Scale Categories: Area of Difficulty	Average Level of Difficulty*	Scoring Codes
Impulsive/Addictive	0.8	3=quite a bit
Psychosis	0.8	4=extreme

On the self report form SF-12, clients in the Contra Costa program rate their physical health as good and their mental health slightly lower. The clients scored themselves, on average, at 85 for physical health and 79 for mental health, both in the less impaired range. See Table 5.6 below

Table 5.6 SF12 (Mental and Physical Health Survey)
at Admission Contra Costa
(Table includes 1st time admissions only)

Summary Measures	Standardized Data Averages	Standard Deviation
Physical Health	85.5	8.0
Mental Health	78.2	7.1

SF-12 Scoring:
Most Impaired Least Impaired
0. . . 5. . . 15. . . 25 . . . 35 . . . 45 . . . 55 .. . 65 . . 76 .. . 86 . .. 95 . . 100 . . .

Merced

As rated by the clinician using the K Axis, the average client in the Merced program is having serious difficulties functioning in the areas of psychological impairment and substance abuse. The average client's scores on the K Axis indicate he has moderate to almost mild problems functioning in the remaining areas, see Table 5.7. The highest level of functioning was reported for medical impairment and violence, where the scores are in the high sixties, indicating moderate to almost mild impairment.

Table 5.7 Kennedy Subscale Scores
At Admission Merced

Sub-scale Item	Mean	Standard Deviation
Psychological Impairment	56.7	10.2
Social Skills	61.8	11.3
Violence	67.0	13.0
ADL-Occupational Skills	60.6	13.0
Substance Abuse	56.6	11.5
Medical Impairment	69.2	13.6

K Axis Scoring Codes: 100=Superior; 90=good skills; 80=slight impairment; 70=mild difficulties; 60=moderate difficulties; 50=serious impairment; 40=major impairment; 30=considerable problems; 20=major problems functioning; 10=chronic problems

Responses on the CA-QOL suggest that the quality of life for the average client in Merced is marred by unhappiness with finances, and dissatisfaction in the areas of life in general, leisure activities, daily activities, and health. Mixed feelings are reported for other areas, see table 5.8

Table 5.8 Subjective Scores Of The California Quality Of Life At Admission Merced

Subjective Scales	Mean	Scale Codes
General Life Satisfaction	3.6	
Satisfaction with Living Situation	4.3	1=Terrible
Satisfaction with Leisure Activities	3.7	2=Unhappy
Satisfaction with Daily Activities	3.8	3=Mostly Dissatisfied
Satisfaction with Family Relationships	4.0	4=Mixed
Satisfaction with Social Relations	4.3	5=Mostly Satisfied
Satisfaction with Finances	2.6	6=Pleased
Satisfaction with Safety	4.7	7=Delighted
Satisfaction with Health	3.6	

Phone calls with family members happen at least once a month, if not more often, for roughly a third of the Merced clients, see table 5.9-A. One quarter report having no family and another quarter of the clients report no phone calls at all. Family get-to-gethers are slightly more frequent, with a little over a third reporting at least one visit a month, if not more, see Table 5.9-A. Inexplicably, more clients report having no family in response to this question than to the previous one concerning telephone calls. Since the CA-QOL is a client completed form, it is not possible to explain these differences.

Table 5.9-A CA-QOL Objective Scale Scores on Family Items At Admission Merced

Family Objective Scale Items	Numbers	Percent
Frequency of Family contacts by phone:		
At least once a day	1	0.7
At least once a week	17	12.0
At least once a month	24	16.9
Less than once a month	32	22.5
Not at all	33	23.2
No Family	35	24.6
Total	142	100
Frequency of getting together with a family member?		
At least once a day	2	1.4

Family Objective Scale Items	Numbers	Percent
At least once a week	18	12.7
At least once a month	29	20.4
Less than once a month	19	13.4
Not at all	27	19.0
No Family	47	33.1
Total	142	100

Social visits with non-roommate friends are common for the Merced clients, more than a fifth of those that responded to this question report daily visits, another 12.8% report weekly visits, and almost 18% reporting at least monthly visits, see table 5.10-B. Unfortunately, almost a quarter report no visits with friends. Also unfortunate is that data on telephone calls to non-roommate friends are missing for 70% of the clients in Merced. Planning something with a friend happens at least monthly for 16% of the clients. This question is also missing 70% of responses. The outside evaluators will review this problem with the county project staff.

Time spent with a boyfriend/girlfriend/spouse is reported as a daily occurrence for over a third of the Merced clients, with 15.7% reporting weekly contact, see Table 5.9-B. Slightly more than a quarter of the clients report no time spent with a boyfriend/girlfriend/spouse.

Table 5.9-B CA-QOL Objective Scale Scores on Social Relations At Admission Merced

Social Skills Objective Scale Items	Numbers	Percent
How often do you visit with someone who does not live with you?		
At least once a day	30	21.1
At least once a week	18	12.8
At least once a month	25	17.7
Less than once a month	34	24.1
Not at all	34	24.1
Total	141	100
No Response	1	-
How often do you telephone someone who does not live with you?		
At least once a day	9	20.9
At least once a week	17	39.5
At least once a month	8	18.6

Social Skills Objective Scale Items	Numbers	Percent
Less than once a month	4	9.3
Not at all	5	11.3
Total	43	100
No Response	99	-
Do something with another person that you planned ahead of time?		
At least once a day	3	6.9
At least once a week	11	25.6
At least once a month	9	20.90
Less than once a month	11	25.6
Not at all	9	20.9
Total	43	100
No Response	99	-
Total	142	100
How often do you spend time with someone you consider more than a friend, like a spouse, a boyfriend or a girlfriend?		
At least once a day	51	36.4
At least once a week	22	15.7
At least once a month	5	3.6
Less than once a month	21	15.0
Not at all	41	29.3
Total	140	100
No Response	2	

Merced clients report approximately $67 a month of spending money. They report their health as good, see Table 5.9-C.

Table 5.9-C CA-QOL Objective Scale Scores for Money and Health At Admission Merced

Objective Scale Items	Average Score	Scoring Codes
Amount of Spending $$	$67	1 = Less than $25 a month 3 = $51 to $75 a month 5 = More than $100 a month
General Health Status	3.2	1 = Excellent 3 = Good 5 = Poor

On average, the Merced clients report adequate money for food, but not for clothing, housing or anything else, see table 5.9-D. Unfortunately, a sixth report they have been a victim of violent crime within the previous month, and almost a third have been a victim of a nonviolent crime in that same time period. Approximately a fifth of the clients report being arrested or picked up by police in the previous month.

Table 5.9-D CA-QOL Objective Scale Scores
At Admission Merced
(Table includes 1st time admission only)

Objective Scale Items	YES	NO	YES	NO
	#	#	%	%
Adequate Money for Food	85	46	65	35
Adequate money for Clothing	13	118	10	90
Adequate money for Housing	20	111	15	85
Adequate money for Local Travel	11	120	8	92
Adequate money for Social Activities	43	88	33	67
Victim of Violent Crime	24	107	18	82
Victim of Nonviolent Crime	40	91	31	69
Arrested?	36	128	22	78

On the ASI, Merced clients report serious problems in the areas of employment and psychiatric status. They reported few problems with legal issues or substance abuse, see Table 5.10. As noted previously, the alcohol score is rated as a more serious problem than drugs, although still in the low, least severe end of the scale.

Table 5.10 Addiction Severity Index Sub-scales Scores
At Admission Merced
(Table includes 1st time admission only)

Sub-scale Categories	Average Score	Standard Deviation
Medical Status	0.4	0.4
Employment Status	0.7	0.3
Alcohol Use	0.3	0.2
Drug Use	0.1	0.1
Legal Status	0.1	0.2
Family/ Social Relationships	0.3	0.2
Psychiatric Status	0.6	0.2
ASI Scoring codes: Least severe 0 .1 .2 .3 .4 .5 .6 .7 .8 .9 1 Most severe		

On the BASIS-32, the average Merced client reports having moderate problems with relationships, depression/anxiety, and daily living skills, see table 5.11 below. Merced clients rates themselves as having a little problem in the areas of impulsive/addictive behavior and psychosis.

Table 5.11 Behavior And Symptom Identification Scale (BASIS-32)
At Admission Merced
(Table includes 1st time admission only)

SubScale Categories: Area of Difficulty	Average Level of Difficulty*	Scoring Codes
Relation to Self/Others	2.1	0=no difficulty
Depression/Anxiety	2.3	1=a little
Daily Living Skills	2.2	2=moderate
Impulsive/Addictive	1.3	3=quite a bit
Psychosis	1.3	4=extreme

On the client-completed SF-12, the average Merced client rate his own physical health as good and his mental health as fair, see table 5.12 below.

Table 5.12 SF12 (Mental and Physical Health Survey)
at Admission Merced
(Table includes 1st time admission only)

Summary Measures	Standardized Data* Averages	Standard Deviation
Physical Health	86.7	7.0
Mental Health	76.3	7.9

SF-12 Scoring:
Most Impaired Least impaired
0. . . 5. . . 15. . . 25 . . . 35 . . . 45 . . . 55 . . . 65 . . . 76 . . . 86 . . . 95 . . . 100

San Diego

The San Diego clients are rated on the K Axis as having major or serious problems functioning in most areas of life, see table 5.13. As rated by a clinician, the average client has major problems with psychological impairment, and serious problems with everything else except medical impairment. Medical problems are rated as mild.

Table 5.13 Kennedy Subscale Scores
At Admission San Diego

Subscale Item	Mean	Standard Deviation
Psychological Impairment	43.9	10.8
Social Skills	51.4	12.2
Violence	58.4	14.0
ADL-Occupational Skills	51.1	15.4
Substance Abuse	50.9	12.8

Subscale Item	Mean	Standard Deviation
Medical Impairment	70.7	15.5

K Axis Scoring Codes: 100=Superior; 90=good skills; 80=slight impairment; 70=mild difficulties; 60=moderate difficulties; 50=serious impairment; 40=major impairment; 30=considerable problems; 20=major problems functioning; 10=chronic problems

The client's perspective of their quality of life as measured by the CA-QOL suggests that the average client is mostly dissatisfied with life in general, with leisure activities, and with social relations, see Table 5.14. Slightly higher ratings, are reported for satisfaction with living situation, with daily activities, family relationships and health. The average client in San Diego is least satisfied with finances and most satisfied with safety.

Table 5.14 Subjective Scores Of The California Quality Of Life At Admission San Diego

Subjective Scales	Mean	Scale Codes
General Life Satisfaction	3.4	
Satisfaction with Living Situation	3.9	1=Terrible
Satisfaction with Leisure Activities	3.4	2=Unhappy
Satisfaction with Daily Activities	3.9	3=Mostly Dissatisfied
Satisfaction with Family Relationships	3.7	4=Mixed
Satisfaction with Social Relations	3.3	5=Mostly Satisfied
Satisfaction with Finances	2.5	6=Pleased
Satisfaction with Safety	4.5	7=Delighted
Satisfaction with Health	3.6	

Over half of the clients in San Diego report at least weekly phone contact with their families, see Table 5.15-A. Visits with their families happen less frequently, roughly 40% have weekly or more frequent visits, but a quarter report no visits at all.

Table 5.15-A CA-QOL Objective Scale Scores on Family Items At Admission San Diego

Family Objective Scale Items	Numbers	Percent
Frequency of Family contacts by phone:		
At least once a day	25	18.8
At least once a week	46	34.6
At least once a month	21	15.8
Less than once a month	23	17.3
Not at all	16	12.0
No Family	2	1.5
Total	133	100
Frequency of getting together with a family member?		

Family Objective Scale Items	Numbers	Percent
At least once a day	21	15.9
At least once a week	32	24.2
At least once a month	19	14.4
Less than once a month	25	19.0
Not at all	33	25.0
No Family	2	1.5
Total	132	100
No Response	1	-

Visits with non roommate friends happen weekly for a third of the sample, but more than one quarter report no visits, see Table 5.15-B. Phone contacts with non roommate friends happens more frequently, over half of the clients report weekly or daily telephone contact. Planning a get-to-gether with friends is a frequent occurrence for the San Diego clients, with a more than quarter planning something weekly, see below, Table 5.15-B. Spending time with a spouse/boyfriend/girlfriend doesn't happen for over half the sample, but those that do report spending time with a spouse/boyfriend/girlfriend, do so weekly or daily, see below.

Table 5.15-B CA-QOL Objective Scale Scores on Social Relations At Admission San Diego

Social Skills Objective Scale Items	Numbers	Percent
How often do you visit with someone who does not live with you?		
At least once a day	18	13.7
At least once a week	46	35.1
At least once a month	22	16.8
Less than once a month	11	8.4
Not at all	34	26.0
Total	131	100
No response	2	1.5
How often do you telephone someone who does not live with you?		
At least once a day	28	21.3
At least once a week	48	36.6
At least once a month	18	13.7
Less than once a month	16	12.2

Social Skills Objective Scale Items	Numbers	Percent
Not at all	21	16.0
Total	131	100
No Response	2	1.5
Do something with another person that you planned ahead of time?		
At least once a day	10	7.6
At least once a week	37	28.5
At least once a month	27	20.7
Less than once a month	24	18.4
Not at all	32	24.6
Total	130	100
No Response	3	-
How often do you spend time with someone you consider more than a friend, like a spouse, a boyfriend or a girlfriend?		
At least once a day	18	14.0
At least once a week	19	14.8
At least once a month	9	7.0
Less than once a month	10	7.8
Not at all	72	56.3
Total	128	100
No Response	5	-

San Diego clients have less money, on average, than clients at other projects with approximately $50 a month spending money. They rate their general health status as fair, see Table 5.15-C.

Table 5.15-C CA-QOL Objective Scale Scores for Money and Health At Admission San Diego

Objective Scale Items	Average Score	Scoring Codes
Amount of Spending $$	$50	1 = Less than $25 a month 3 = $51 to $75 a month 5 = More than $100 a month
General Health Status	3.4	1 = Excellent 3 = Good 5 = Poor

Clients in the San Diego project reported having adequate money for food, housing, and local travel, see table 5.15-D. They do not have enough money for clothing and social activities. Fortunately, the majority have not been a victim of

a crime. However, 20% percent report being a victim of a violent crime in the previous month and 39% report being a victim of a non violent crime during the same period. Again, this is consistent with other studies and the other projects in this study that report increased victimization rates for this population. Just over a fifth report being arrested or picked up by the police within the previous month. The use of official arrest histories in the final report should help clarify this.

Table 5.15-D CA-QOL Objective Scale Scores
At Admission San Diego
(Table includes 1st time admissions only)

Objective Scales (ratings for past month)	YES #	NO #	YES %	NO %
Adequate Money for Food	80	34	70	30
Adequate money for Clothing	52	62	45	55
Adequate money for Housing	83	31	73	27
Adequate money for Local Travel	72	42	63	37
Adequate money for Social Activities	21	79	31	69
Victim of Violent Crime	23	91	20	80
Victim of Nonviolent Crime	44	70	39	61
Arrested?	24	90	21	79

As indicated by the ASI, San Diego clients do not have many alcohol and drug problems. As Table 5.16 shows, clients on average report the most severe problem with employment, and the least severe problem with drug use. Again, alcohol is rated as a more severe problem than drugs, see Table 5.16, below.

Table 5.16 Addiction Severity Index Subscales Scores
At Admission San Diego
(Table includes 1st time admissions only)

Subscale Categories	Average Score	Standard Deviation
Medical Status	.4	.37
Employment Status	.8	.27
Alcohol Use	.2	.16
Drug Use	.1	.07
Legal Status	.1	.15
Family/ Social Relationships	.4	.54
Psychiatric Status	.6	.19

ASI Scoring codes:
Least severe 0 .1 .2 .3 .4 .5 .6 .7 .8 .9 1 Most severe

As reported on the BASIS-32, San Diego clients report moderate difficulties in the areas of interpersonal relations, depression, anxiety and daily living, see Table 5.17. They report a little difficult in the area of impulsive/addiction and psychosis. This is consistent with the ASI self-report discussed above.

Table 5.17 Behavior And Symptom Identification Scale (BASIS-32)
At Admission San Diego
(Table includes 1st time admissions only)

SubScale Categories: Area of Difficulty	Average Level of Difficulty*	Scoring Codes
Relation to Self/Others	2.3	0=no difficulty
Depression/Anxiety	2.3	1=a little
Daily Living Skills	2.2	2=moderate
Impulsive/Addictive	1.2	3=quite a bit
Psychosis	1.2	4=extreme

On the client-completed SF-12, the average client in the San Diego project gave much lower scores for physical health and moderate scores for mental health than clients at the other projects, see Table 5.18.

Table 5.18 SF12 (Mental and Physical Health Survey)
at Admission San Diego
(Table includes 1st time admissions only)

Summary Measures	Standardized Data* Averages	Standard Deviation
Physical Health	53.5	11.3
Mental Health	33.3	11.4

SF-12 Scoring:
Most Impaired Least Impaired
0. .. 5. . 15. . 25 . . 35 . . 45 . . . 55 . . . 65 . . . 76 . . . 86 . . . 95 . .. 100

Santa Cruz

Clients in the Santa Cruz program were rated by Clinicians using the K Axis as having serious to moderate difficulties functioning in most areas of their lives. Substance abuse and psychological impairment present serious to moderate difficulties for the average client, see Table 5.19. Medical impairment is the least problematic, suggesting mild impairments. In the remaining areas, the average scores indicate moderate impairment.

Table 5.19 Kennedy Subscale Scores
At Admission Santa Cruz

Subscale Item	Mean	Standard Deviation
Psychological Impairment	58.5	12.8
Social Skills	62.8	10.8

Subscale Item	Mean	Standard Deviation
Violence	67.1	11.3
ADL-Occupational Skills	61.0	11.6
Substance Abuse	52.1	6.7
Medical Impairment	70.4	9.4

K Axis Scoring Codes: 100=Superior; 90=good skills; 80=slight impairment; 70=mild difficulties; 60=moderate difficulties; 50=serious impairment; 40=major impairment; 30=considerable problems; 20=major problems functioning; 10=chronic problems

As measured by the CA-QOL, Santa Cruz clients reported, on average, mixed feelings concerning most areas of their lives, see Table 5.20. The least satisfaction is with finances, with the average score in the mostly dissatisfied range.

Table 5.20 Subjective Scores Of The California Quality Of Life At Admission Santa Cruz

Subjective Scales	Mean	Scale Codes
General Life Satisfaction	4.3	
Satisfaction with Living Situation	3.9	1=Terrible
Satisfaction with Leisure Activities	4.4	2=Unhappy
Satisfaction with Daily Activities	4.4	3=Mostly Dissatisfied
Satisfaction with Family Relationships	4.4	4=Mixed
Satisfaction with Social Relations	4.4	5=Mostly Satisfied
Satisfaction with Finances	3.2	6=Pleased
Satisfaction with Safety	4.8	7=Delighted
Satisfaction with Health	4.0	

Telephone calls with family members occur once a month or more frequently for almost one third of the Santa Cruz clients. Thirty-eight percent report no family telephone calls, and ten percent report having no family, see Table 5.21-A. Visits with family members happen more frequently than phone contact, with forty-six percent of the clients reporting at least monthly, if not more frequent, visits. Interestingly, more clients replied to this question by reporting they had no family (16%) than they did in answer to the questions concerning telephone contact with family (10%). See Table 5.21-A.

Table 5.21-A CA-QOL Objective Scale Scores on Family Items At Admission Santa Cruz

Family Objective Scale Items	Numbers	Percent
Frequency of Family contacts by phone:		
At least once a day	1	2.0
At least once a week	4	8.0
At least once a month	11	22.0

Family Objective Scale Items	Numbers	Percent
Less than once a month	10	20.0
Not at all	19	38.0
No Family	5	10.0
Total	50	100
Frequency of getting together with a family member?		
At least once a day	1	2.0
At least once a week	9	18.0
At least once a month	13	26.0
Less than once a month	6	12.0
Not at all	13	26.0
No Family	8	16.0
Total	50	100

Visits with non-roommate friends happens daily for one fifth of the Santa Cruz clients, but almost a quarter report no visits, see Table 5.21-B. Telephone contact with non roommate friends most frequently happens at least once a week, however, data are missing on this question for 68% of the sample. see Table 5.21-B.

Planning an activity with another person happens approximately weekly for 12% of those responding to this question, and another 37.5% report doing this at least once a month, but again, data are missing for 68% of the clients.see Table 5.21-B.

Time spent with a spouse/boyfriend/girlfriend is most likely to be once a month for those who answered this question, see Table 5.21-B. Again, over half of the clients did not answer this question. Since the Santa Cruz program is a residential program, it is not surprising that no one reported daily contact with a spouse/boyfriend/girlfriend.

Table 5.21-B CA-QOL Objective Scale Scores on Social Relations At Admission Santa Cruz

Social Skills Objective Scale Items	Numbers	Percent
How often do you visit with someone who does not live with you?		
At least once a day	11	22.4
At least once a week	3	6.1
At least once a month	9	18.4

Social Skills Objective Scale Items	Numbers	Percent
Less than once a month	14	28.6
Not at all	12	24.4
Total	49	100
No response	1	2.0
How often do you telephone someone who does not live with you?		
At least once a day	2	4.0
At least once a week	8	16.3
At least once a month	5	10.2
Less than once a month	1	2.0
Not at all	0	0.0
Total	16	100
No Response	34	-
Do something with another person that you planned ahead of time?		
At least once a day	0	0.0
At least once a week	2	4.0
At least once a month	6	12.0
Less than once a month	2	4.0
Not at all	6	12.0
Total	16	100
No Response	34	-
How often do you spend time with someone you consider more than a friend, like a spouse, a boyfriend or a girlfriend?		
At least once a day	0	0.0
At least once a week	2	12.5
At least once a month	6	37.5
Less than once a month	2	12.5
Not at all	6	37.5
Total	16	100
No Response	34	-

Santa Cruz clients have an average of $175 spending money per month and they rate their general health status as good, see table 5.21-C.

Table 5.21-C CA-QOL Objective Scale Scores for Money and Health At Admission Santa Cruz

Objective Scale Items	Average Score	Scoring Codes
Amount of Spending $$	$176	1 = Less than $25 a month 3 = $51 to $75 a month 5 = More than $100 a month
General Health Status	3.5	1 = Excellent 3 = Good 5 = Poor

The majority of Santa Cruz clients report adequate money for food but not enough for anything else, see table 5.21-D. Fewer Santa Cruz clients report being victims of violent crime in the previous month than in other projects, just 16%. However, almost a third report being a victim of a non violent crime, comparable to the other projects. Forty-six percent report being arrested or picked up by the police in the previous month, more than at any other project.

Table 5.21-D CA-QOL Objective Scale Scores At Admission Santa Cruz (Table includes 1st time admissions only)

Objective Scales (ratings for past month)	YES #	NO #	YES %	NO %
Adequate Money for Food	35	15	70	30
Adequate money for Clothing	13	37	26	74
Adequate money for Housing	14	36	28	72
Adequate money for Local Travel	12	38	24	76
Adequate money for Social Activities	21	29	42	58
Victim of Violent Crime	8	42	16	84
Victim of Nonviolent Crime	18	32	36	64
Arrested?	21	25	46	54

As measured by the Addiction Severity Index, the average Santa Cruz client reports problems in the areas of employment and psychiatric status. The least problematic areas are drug and alcohol use. Possible explanations for the low scores are discussed previously, in the Overview to this section, see page 36.

Table 5.22 Addiction Severity Index Subscales Scores At Admission Santa Cruz (Table includes 1st time admissions only)

Sub-scale Categories	Mean	Standard Deviation
Medical Status	0.4	0.3

Sub-scale Categories	Mean	Standard Deviation
Employment Status	0.8	0.3
Alcohol Use	0.2	0.2
Drug Use	0.1	0.1
Legal Status	0.2	0.2
Family/ Social Relationships	0.2	0.2
Psychiatric Status	0.5	0.3
ASI Scoring codes: Least severe 0 .1 .2 .3 .4 .5 .6 .7 .8 .9 1 Most severe		

Self rating scores on the Basis-32 show that on average, clients report the least severe problems with addiction and psychosis. More difficulty is reported for relationships, depression/anxiety and daily living skills.

Table 5.23 Behavior And Symptom Identification Scale (BASIS-32)
At Admission Santa Cruz
(Table includes 1st time admissions only)

Sub-Scale Categories: Area of Difficulty	Average Level of Difficulty*	Scoring Codes
Relation to Self/Others	1.8	0=no difficulty
Depression/Anxiety	1.8	1=a little
Daily Living Skills	1.7	2=moderate
Impulsive/Addictive	0.9	3=quite a bit
Psychosis	1.0	4=extreme

When asked to rate their mental and physical health at admission, the average Santa Cruz client's response is to give moderately high scores to physical health and lower somewhat scores to mental health, see table 5.24.

Table 5.24 SF12 (Mental and Physical Health Survey)
at Admission Santa Cruz
(Table includes 1st time admissions only)

Summary Measures	Standardized Data* Averages	Standard Deviation
Physical Health	86.0	10.8
Mental Health	77.0	9.2

SF-12 Scoring:
Most Impaired Least Impaired
0. . . 5. . . 15. . . 25 . . . 35 . . . 45 . . . 55 . . . 65 . . . 76 . . . 86 . . . 95 . . . 100

VII. QUALITATIVE DATA

Qualitative Data - Case Studies

Behind the numbers discussed above are complex human being living (and dying) with two chronic relapsing problems. The numbers can only present a limited view of what is going on in individual cases. One way to put a face to the numbers, to provide more in-depth description of the programs and their clients is to provide qualitative data in the form of case studies and staff interviews. This section provides case studies of actual project clients. The section following this one will provide qualitative data from program staff.

Each of the projects has provided one or two case studies that illustrate the complex issues that are involved with treating dually diagnosed individuals. In all of the case studies provided, the names have been changed to protect and respect the privacy of clients. These case studies not only provide a picture of the dually diagnosed clients, they also present a portrait of the staff who are working with these clients.

One theme that has emerged from all four projects is that dually diagnosed clients are very labor-intensive cases. Providing integrated treatment is time-consuming and for most of the clients, it involves help in more areas than just providing coordinated mental health and substance abuse treatment. The following case study comes from the Contra Costa project. The nature of the Contra Costa program, with its focus on Assertive Community Treatment, is clearly seen in this case study. The labor-intensive nature of working with dually diagnosed clients is also clearly seen.

Willie's Story

Willie Smith is a 52-year old Caucasian male who suffers from Dementia. How he got dementia is quite a story. As the story goes, he was trying to get drugs from a dealer. Things went wrong and the dealer beat Willie on the head several times with a baseball bat. Willie later found his way down the street, where he was shot in the head by a drive-by shooter—most likely the same drug dealer. The major head trauma left him impaired.

Willie is a polysubstance abuser—mostly crack and alcohol. Possibly linked to his substance abuse disorder, Willie had been picked up in the past for shoplifting and currently has a court case pending in Modesto because he jumped bail. He's had his share of tough times—about 24 crisis episodes since 1994 alone—one in 1994, then 17 in 1997 (a particularly difficult year for Willie), and six in 1998.

Willie was homeless when the Crisis Unit sent him over to the Dual Recovery (DR) Project. Back then, the only way one could get in touch with Willie was to locate him at shelters or "under the bridge." Periodically he might be found at 'Uncle Bob's' (a flophouse, or drug house, where addicts go to do drugs and crash for the night). On Monday mornings, the Dual Diagnosis (DD) Specialist would go to the West County Multiservice Center and find Willie there waiting to

pick up his SSI check The specialist said "His whole focus that day would be to get his money. He didn't want to talk to anybody; he wanted his money."

One day the DD Specialist and another assigned case manager took Willie to lunch at Coco's Restaurant. This was a turning point for him and his engagement with the DR Project. He said, "I can't believe ya'all would sit in this nice restaurant and eat with me." According to the DD Specialist, "Willie was used to people looking down on him. And we were willing to sit there and eat with him even though he smelled and was dirty—we still sat there and ate with him and treated him like a normal person. And that was when we started to make progress with Willie."

The first task the DD Specialist set out to accomplish was to get Willie properly medicated—that was rather simple. Willie coped with his illness by self-medicating on drugs and alcohol when he ran out of medication. Willie ran out of medication quickly because he would take three and four times the prescribed dose. His DD Specialist placed him on medication monitoring and gave Willie a medication grid with a week's supply set up for each day of the week.

The second task, getting Willie permanent housing, proved to be more difficult. Willie had a "bad rep" with landlords. He was kicked out of his last place for "breaking in" by going up the fire escape and the rooftop, and crawling in the windows in the rear of the building. The DD Specialist helped him to get back in eventually, but it did not work out—Willie complained about roaches and rats and "drug users" being in the building. After a month of hotel stays, and eventually returning to shelters, his DD Specialist came up with the idea of getting Willie a used mobile home (Willie had a large "retroactive" SSI check). They helped him purchase an affordable mobile home and started looking for a space to house the mobile home. After more than a month of looking and delays (by a trailer park owner), a lot was finally found in the city of Concord.

The DD Specialist helped Willie to move in by purchasing needed articles (dishware, food, cleaning supplies, etc.) and he even hired someone to do the initial cleaning. All of the furniture in Willie's home is donated. The hardest part was helping Willie to change his mindframe. Even after he moved in, Willie still acted as if he was homeless, not very convinced that that was his home. The specialist explains, "At night, he would keep his clothes on and would not take them off. And he would tell you, he's not taking his clothes off because they (other homeless) know if you lay something down, someone's going to rifle—and he was still living in that mode."

His belongings remained packed in boxes. Willie was reticent to do something as simple as turning on the furnace. Says the DD Specialist, "It was starting to get cold, and a trai5ler house is a cold

place to be—it's like living in a tin can. Willie would not turn the furnace on. And his reasoning was that the fumes from the furnace would kill him. So we had to really talk to him. I talked to him and then I talked to him some more. Actually (after getting the okay from the Program Coordinator), I ended up spending a half day with Willie and with the furnace on, just to get him to understand that 'it's not gonna hurt you'."

So, just trying to get Willie set up in his new home required many hours of intensive case management, up to 20 to 25 hours per week. The public rarely hears about the time-consuming labor the DD Specialists expend to aid their clients.

Through the advocacy of the DD Specialist, the County's Health and Housing Integrated Services Network has qualified Willie for Section 8 Housing. Even though he owns the mobile home, Willie is still responsible for paying "lot rent." Without Section 8 support, he would not be able to afford this rent, receiving only $718 a month in SSI and paying about $530 a month for rent and utilities. Through the DD Specialist's additional efforts, the Special Circumstances Department of Contra Costa County has agreed to help with some of the cost for materials to get Willie's mobile home skirted.

Willie spends his days participating in the West County Multiservice Center in the city of Richmond. Getting there is no small feat. Each day, Willie catches a ride with the Phoenix program's Multiservice Center van that travels from Concord to Richmond. Because Willie lives near the freeway where the van passes, the Dual Recovery Project made a special arrangement with the Center to pick Willie up at the freeway entrance. Willie walks a half-mile to get to the stop. To get around Concord, the Dual Recovery Project got him a bicycle. (During the Christmas season, the Star Drug Court works with inmates at San Quentin to rebuild bicycles. Willie's DD Specialist got him one of those bikes.) Within two weeks the bicycle was lost. The specialist notes "We don't know if it got stolen or if it got sold for drugs. He tells us someone went into his pocket, took the keys out, and stole the bike."

Acquiring the mobile home has brought some normalcy to Willie's life. He started having contact with a neighborhood church. On Sundays, he goes because there is a potluck after the church service. Willie even went over by himself and talked to the minister at the church recently. A retired couple residing in a nearby trailer, have taken Willie under their wing and the wife will periodically bring him baked goods. The DD Specialist will occasionally find Willie talking to people on the street when driving in to visit him. As the specialist notes, "That's major improvement."

Some clients need more intensive services than an outpatient program can provide. Prior to receiving funds for this project, Santa Cruz County had a day

treatment and partial hospitalization program for dually diagnosed clients, but they realized that some clients needed more structure and needed to be in a sheltered setting in order to get help with their dual problems. Santa Cruz also noted a need for a continuum of care after residential treatment. Clients with a long history of dual diagnosis in particular seemed to need residential treatment and a more integrated continuum of care in order to begin the recovery process. The following case study illustrates the way in which the residential treatment and the continuum of care provided by this project have helped a client with a long history of treatment failure. The house manager at Paloma House, Santa Cruz's residential treatment facility, wrote this case study.

Fred's story:

Fred is a 51-year old male diagnosed with a psychotic disorder at the age of 18. For the last 30 years he has had a pattern of recurring psychotic episodes. His condition has been further complicated by a co-existing pattern of poly-substance abuse/dependence. His inability to manage either his mental health or his substance abuse led to frequent contact with the mental health system and criminal justice system.

Fred has spent some time in jail, and was hospitalized numerous times, including several state hospital admissions, as well as inpatient stays at a local Mental Health Unit. He has a history of non-compliance with medications and mental health treatment. He also has runaway from placements in board and care homes. In addition, he has a history of chronic abuse of marijuana, LSD, heroin, cocaine, and alcohol, and has not responded to traditional chemical dependence (CD) treatment. His behaviors during this period were marked by bouts of aggression, hostility, and violence.

Fred was admitted to Paloma House in October, 1997. He entered the program ambivalent about and resistant to treatment. This manifested itself in the form of occasional agitation and verbally abusive outbursts directed at staff in general, and his primary counselor in particular. Gradually, he developed a willingness to "work the program," developing a good, internalized understanding of a 12-step program. Key to this willingness was the relationship and connection he developed with his counselor. He also managed to stay relatively compliant with his treatment plan and was supportive of peers. The initial focus of his treatment was didactic and educational regarding his illnesses and how they impact his life, e.g., thoughts, moods, and behaviors). He began to understand what his particular symptoms are, how to control/manage these symptoms, and how to identify the early warning signs of psychiatric relapse and substance relapse. As he progressed in the program, treatment began to focus on the totality of his recovery (CD and mental health) needs: mental, emotional, physical, and spiritual.

Fred completed 90 days at Paloma House and moved to transitional housing, where he lived for another four months. He worked with his

counselor in developing an aftercare plan that consisted of continued attendance at 12-step groups, consistent contact with his sponsor and counselor, continued compliance with psychiatric medications and mental health treatment, and the creation of meaningful, productive structured time for himself.

After four months at the transitional housing, Fred moved to "clean and sober housing." He has been living in this supported housing situation, which he shares with two other clean and sober graduates of Paloma House, for the last two years. He has continued to maintain his sobriety and mental health stability, and has become a role model for others in the community. He is sponsoring another Paloma House graduate, and has remained active in the Watsonville 12-step community. His appearance in a video about Paloma House led to his being invited to speak at a statewide dual diagnosis convention. He did so well at this convention that he has been invited to speak at a second convention.

Not all cases have responded as quickly and as positively as Fred. Santa Cruz offered the following case study as an example of someone who has relapsed after leaving Paloma House, a "not-so-successful case." This client has been identified by the Santa Cruz project as one person for whom an integrated after care plan will be critical for her recovery.

Ginny's Story:
Ginny is a 35-year old female with a 14-year psychiatric history, with a diagnosis of schizo-affective disorder, and a long history of poly-substance dependence. She has been hospitalized over 20 times for psychotic symptoms, inability to care for herself, and bizarre and dangerous behaviors. She has spent at least 18 months on conservatorship, and is currently on probation for assaulting her boyfriend with a pipe. She has a history of non-compliance with mental health treatment, including medications. Prior mental health and chemical dependence (CD) treatment placements were ineffective for this client.

Ginny was accepted in the program in August 1997. She accepted placement here as a means of avoiding incarceration. She showed a strong resistance to treatment while she was in Paloma House, as well as a pattern of instability in her interpersonal relationships with staff and peers. She called the mental health advocate several times to complain about how she was being treated at Paloma House. She had conflicts with other residents frequently and became easily agitated, argumentative, and defiant. She did manage to complete several goals during her stay and was working on developing skills to understand and manage her anger. However, she had a tendency to focus her attention on her boyfriend, who was still actively using drugs/alcohol. This focus became problematic for Ginny, keeping her from actively working on her own program of recovery. She was in a constant state of anxiety, confusion, and anger.

She completed her 90 days at Paloma House, but declined an option to move into transitional housing and instead moved in with her boyfriend (who later became her husband) and abandoned her aftercare plan. She stopped taking her psychiatric medications, did not attend 12-step groups, and withdrew from contact with her sponsor, her mental health coordinator, and her psychiatrist. In a short period of time, she had relapsed on heroin.

She spent the next two years moving around the state and spent some time in a state hospital (unverified). Her psychiatric condition steadily worsened and her drug use increased. She made two suicide attempts. Recently, she has had three successive inpatient stays on a local mental health unit because her dangerous behavior and persistent symptoms interfered with her ability to function in the community.

Ginny has now returned to Paloma House in another attempt to manage her dual illnesses. Treatment has been modified and individualized to more closely address her anger issues, her severe psychiatric symptoms, and the intense, unstable, destructive relationship with her husband. Behaviors, symptoms, etc. from her first stay have become areas of treatment during this stay. Her treatment is progressing very slowly at present. The initial focus is on maintaining mental health stability and abstaining from relapsing on drugs while she is a resident of the program. This is a moment-by-moment process for her right now. Once she achieves stability, treatment will deepen to address her interpersonal issues and how they impact her mental health and her sobriety.

If she is able to complete 90 days in the program, aftercare planning will be more intensive and structured for her than the first time around, to include strong encouragement for Ginny to spend an additional 90 days in transitional housing.

The next case study offers a vivid portrait of a woman who has been in the San Diego treatment program for two and a half years. This case demonstrates the close working relationship the San Diego program has with other community programs to treat dually diagnosed clients. It also represents the complexity of problems a dually diagnosed clients bring into treatment - issues including psychiatric problems, substance abuse problems, neglect and abuse issues that affect the client's ability to trust and to interact with others. This case study is told by the client's care coordinator. It offers a social worker's perspective on one patient's dual diagnosis treatment.

Big Deal, Huh?

Through the window with a view to the street, I spotted Hannah, moving quickly along the uneven sidewalk, the concrete thrust up in certain places by the meandering growth of roots from the catalpa trees that line this end of the block. Despite these obstacles, her

pace remained steady, determined, an athletic looking young lesbian woman with a rosy pallor, fashionably spiked brown hair, heading in to her weekly therapy session. And predictably, she was once again five minutes late. Right on time.

We greeted one another in the clinic waiting room and walked together to my office. As we approached my doorway, she moved ahead of me and poked her head into my colleague's doorway. With a buoyant, lilting laugh she wisecracked, "How's it going' crazy lady?" The usual hellos ensured, after which Hannah made a swift about face, lurched into my office and threw herself into her customary corner chair.

Hannah rarely required prompting to get things under way. Having just walked the mile from her place to the clinic, she'd absorbed an array of solo and ensemble human behavior and was primed to comment with quip, jibe, or respectful description, what she'd noticed along the way. The keen sense of the world around her today, though, felt even more acute that usual. Hannah had something special for both of us, and everything else could wait. She stretched across from her chair, first looking to me and then to the window and stated in a slightly fluttering tone of distrust, "One more week and I'll have a year." Hannah was now thirty-four years old and had been using crystal methamphetamine since she was twenty-one. Until now, her longest stretches without crystal were two six month periods three years apart. Though she tries to play it down, she breaks into a smile and says "I guess this is a big deal, huh?"

Although I mouthed something congratulatory, even going so far as to extend a self-conscious hand shake, at this moment I really did not know how to respond to Hannah. As psychiatrist and author Irv Yalom writes, "Some patients are easy, they appear in my office poised for change and the therapy runs itself." Hannah was not one of these individuals. She'd had to slug it out every inch of the way.

Hannah made her first appearance in our dual diagnosis program two and a half years ago. She was accompanied by a female peer counselor from a residential rehabilitation program where Hannah was seeking placement. Unkempt, pale, gaunt, and seemingly without speech, she sat in front of me an unwilled sequence of quivers and shudders running through the length of her body. I asked one question: "Are you high now?" With a just perceptible nod, she shook her head yes. I addressed Hannah's chaperone and told her to return when Hannah had completed a detoxification program and we would admit her at that time. She and Hannah left the clinic and by the end of the week I'd forgotten their visit.

Six weeks later Hannah returned. She was now a resident in the local YWCA Women in Transition Program, a six month residential treatment model that served homeless women with a substance

abuse disorder. She had also been abstinent from crystal meth use since her initial visit to the clinic. Besides the supportive care groups, the relapse and recovery groups, the individual care, and the psychiatric treatment she would begin receiving through our DD treatment program, she was also attending 12-step meetings on a regular basis. However, Hannah's long-standing and complex psychiatric disorder would, for her, remain an unrelenting obstacle over the next 18 months. Despite skillful clinical treatment (which simultaneously addressed her psychiatric and substance dependence disorders) coupled with her unflagging determinations, Hannah's next year and a half proved to be an arduous struggle for emotional stability and sobriety.

In strict clinical terms, Hannah suffered from a bipolar disorder, a recurrent Axis I psychiatric ailment marked by mixed episodes of mania and depression, or in Hannah's case, a repeat of manic episodes which outnumbered the incidents of depression. At various times in her life, without the influence of drugs, Hannah had entered periods of mania in which she required little or no sleep for days on end, running up immense credit card debts, losing jobs, shattering relationships, returning to the use of crystal meth, and eventually ending up homeless. Fortunately, over the last year, the prescribed medications that Hannah took daily to address the more severe symptoms of a bipolar disorder, have helped her remain essentially symptom free, allowing her to sustain a relatively stable romantic relationship, take a part-time job in the retail sector, and move into her own studio apartment.

However, as Hannah has related the tormented tale of her upbringing in southern Texas, it is apparent that the developmental wounds inflicted by two ill-meaning parents have left the kind of emotional and psychic scars for which there are no official medicines. The list of abuses is harrowing and extensive. "To teach me some lesson" Hannah explained was the reason that her mother would, on a regular basis, lock Hannah in her room for an entire weekend. Hannah's older sister, who somehow escaped similar imprisonment, would secret food to Hannah through her narrow bedroom window. When Hannah complained to her mother of such treatment, she was beat with a coat hanger and was once even burned by her mother with a hot spatula. To this day she bears this scar on her left knee.

Hannah remained with her mother from age six, when her parents divorced, to age thirteen, when she went to live with her father. Sadly, the abuse continued, only changing form. Hannah says, with bitterness, "He hit me against my head so I would remember things."

Despite the protracted, unabated nature of such parental abuse, Hannah somehow managed to maintain a straight A average through high school. She was also a champion cross county runner in her final two years at this same Houston high school. Of this period she

says, "The running made me forget everything they([her parents) did to me." Upon graduation from high school, she received an athletic scholarship to a small north Texas college. She lasted two years.

In her fourth semester at college, she sustained a serious knee injury that ended her running career, but even more significantly, her injury took from her the most effective defense against the residual tides of parental abuse and deprivation. And, in turn, the once manageable and well-defended against symptoms associated with a borderline personality disorder began to surface. Large, vast tracts of unhealed emotional spaces filled with chronic self-loathing, hopelessness, and interior fragmentation. Always trust that others will abandon you. Continue to count on suicide as a way out. Self-soothing is a myth in this wasted borderline territory. This is where Hannah finally broke, the place from where she began her 15 year untreated descent, accompanied by a severe biologically based psychiatric bipolar disorder, immeasurable personal difficulties, and the regular use of crystal methamphetamine.

For now, though, following two and a half years of intense integrated treatment for her dual disorders, she seems safe, at times even content. As she stated of her one year sobriety date, "I guess this is a big deal, huh?"

The chronic nature of having two relapsing conditions is clearly seen in the next case study. Presented below are two perspectives on the progress of a client in the Merced Dual Diagnosis project. The first perspective is that of one of the project staff who has worked with her. The clinician details the relapses, the repeated hospitalizations and victimizations that are common among dually diagnosed persons. The small, barely perceptible, questionable progress made by this client is clearly seen in the clinician's case study. The second perspective is that of the client herself. Taken together these two perspectives on one woman's progress provides a detailed picture of the work of the Merced program and the client's reactions to it.

Clinician's case presentation:

The client, a 39 year old Caucasian female was first admitted to the Merced Dual Diagnosis project (DDP) in October 1997. Her diagnosis was schizoaffective disorder Bipolar type, Alcohol dependent. Her goal at admission was to stop drinking. She described her parents as both heavy drinkers and her mother as having a "nervous breakdown" when the client was 12.

At the time of her first admission to DDP, the client's 11 year old son was in the custody of the client's mother. The client reported that she maintains sporadic contact with her son. She described her then current boyfriend as "drinking a lot" yet she still supported their on-going relationship.

The client's first admission to the DDP lasted almost two months. During contacts with group leaders and clinicians she described ongoing drinking which she felt was triggered by her boyfriend's use of alcohol. She also believed her Depakote medication was causing her to have anxiety and was making her feel depressed and unmotivated (and was not compatible with continued alcohol use, per feedback from medical team). She was encouraged to use journaling to handle some of her frustration and to clarify her thoughts prior to turning to alcohol. This intervention was used because of her strong enjoyment of reading in general. At the time of this first admission, she was prescribed Mellaril and Depakote. However, she continued to share concerns about the side effects and stopped taking Depakote on her own despite knowledge that it helped with some symptoms.

During individual sessions with the A&D counselor, she began to understand that her self-esteem was strongly effected by the chaos in her life (drinking daily, poor relationships) and that her boyfriend added to the dysfunction by continually talking about his ex-girlfriends and generally demeaning her. The client also worked with the DDP staff on understanding how alcohol intensified much of the negative outcomes and could conceivably cause much more chaos if sobriety could not be established. At this period in treatment she reported she was drinking approximately one case of beer per week. No psychotic markers were noted during this time as Mellaril was taken consistently. Compliance could not be easily established with Depakote, however. Her personal relationships with peers were difficult, especially with her boyfriend due to her poor judgement and poor insight overall and generally dysfunctional dependence on him for her self-esteem.

The client was discharged just before Thanksgiving 1997 due to her stated desire that she wanted to "drink now and then" and because she no longer wanted medications. The client was using over the counter meds for sleep and continued to drink to "relax" herself. Poor compliance with treatment appointments and med compliance were discussed heavily among the team, with several home visits made to address client concerns. There were obvious warning signs of further decompensation. The client held to her convictions and was discharged.

Client was readmitted several weeks later. Her goal was to start medications again (Mellaril) and to establish sobriety. Client had been attempting to limit her drinking to p.m. hours only. She had a new boyfriend who was helping share household responsibilities. Due to her new situation and goal of continued employment and housing, the client appeared more motivated to work with the DDP. Her treatment goals at admission were to decrease alcohol use, increase social activities during the day by attending the DDP and going to the library, work on healthy relationships by starting

conversations with new sober friends, and role playing same with staff. The client was identified as a high risk for hospitalization at this time.

The client attended multiple groups, including Women's Issues and Relapse Prevention. She continued on Depakote and Mellaril. She continued to struggle with isolation and boredom related to poor self-worth and outside dependence on boyfriends for her self-esteem. Treatment progress was slow at first. She continued to drink daily and complained of diminished sexual interest from her boyfriend, which hurt her deeply. Staff members described her relationship with her boyfriend as "abusive." Med compliance was still poor. Diet pills were still being used. She was referred to a domestic violence center to assist in setting boundaries with males and getting out of the physical and mental abuse she received from her current boyfriend. At one point she was encouraged to seek shelter at the domestic violence center's safe house. She refused.

The client did attend a counseling session at "A Woman's Place," but felt her situation with her boyfriend would improve despite information suggesting this rarely occurs. Group discussions continued to be focused on ego-building interventions and supporting the client's efforts to express her own painful feelings rather than believing her boyfriend would change.

The client was admitted to the crises support unit in February 1999 following phone calls to Mental Health. The client was intoxicated and highly agitated. She was taken off all meds due to continued drinking (concern over drug interactions) and she was reluctant to utilize all available support at DDP. She returned to her abusive boyfriend against advice from the DDP staff, but agreed to attend the program daily during the week.

The client was hospitalized in early March for grave disability due to "drunken calls" placed to the Public Conservator's office, general intoxication and agitation from sleep deprivation, psychosis and labile mood. She was released three days later after an unsuccessful attempt at a 14 day hold.

The client was encouraged to continue utilize outside AA groups due to her fears of DDP and inability to modify her lifestyle and stop all alcohol consumption. By June 1999 the client had moved out of her boyfriend's apartment but allowed him access to her apartment when he lost his job. The DDP team recommended residential A&D treatment at this time, but the client refused. She had been off all prescription meds for 3 months. She was also encouraged to attend outside AA groups 3 times per week and continued at DDP with relapse Prevention, and Women's Issues groups. A Double Trouble Recovery group was added to her treatment plan.

The client was hospitalized again in July 1999 because she was gravely disabled. She had been assaulted by her boyfriend who had cut her right hand severely with a knife, which caused tendon and nerve damage. The client was not psychotic at the time of the incident, but very agitated. When the client was discharged a week later, she restarted on meds, including Mellaril and Depakote. Medication monitoring was initiated and continues. The issue of alcohol and drug interactions is being evaluated weekly but because she is attending the program sober much more frequently, the DDP staff feels progress has been made.

Residential treatment is still being encouraged but the client refuses all suggestions. She is not in a relationship current and lives by herself. Her abusive boyfriend responsible for the assault against her is still in jail. She has difficulty establishing sobriety and has been restricted from visiting her son on occasions due to drunken behavior. The client has made progress through group discussions in understanding the chaos alcohol has played in her life and she understands how negative her relationship with her ex-boyfriend has been and what it cost her emotionally. She is still attending groups at DDP but is inconsistent overall with sobriety. She believes she relates better to people as a result of improved insight and staff agree. A concern not yet eliminated is how she will do in a new relationship with a male partner.

The current treatment plan focuses on sobriety and re-enrollment into college. She is working to keep her relationship with her son and mother positive to keep visitations comfortable for everyone concerned. She has remained compliant with meds. Our hope is to establish sobriety long enough to build a sense of mastery in the client's own self-care and ultimately keep her out of the hospital and safe in independent living.

This client's view of her experiences and treatment provides an honest glimpse into the experiences of living with dual disorders. The client wrote this case study. Her evaluation of her treatment reminds everyone of the importance of including the client's perceptions in measuring outcomes.

My Evaluation of DD Program:
It's not a question of how or how not the dual diagnosis project helped me. I've been in the program for over two years without any real success because I refused to leave a self-destructive and abusive relationship. I go to AA as well, without much sobriety, although I gained a lot of insight from both the DD and AA.

When the relationship with the man I was living with ended, I felt alone and lost without him. My counselor urged me to talk and allow the DD project to help as much as needed but I wanted to be alone with the pain and anger. Eventually I ended up manic with psychotic

features triggered by drinking binges. I was playing a dangerous selfish game with alcohol and a mental illness.

I learned from my mistakes that I was rejecting professional help. Today I struggle to take mental illness and addiction as serious problems that need my constant attention. I trust the psychiatrist in helping me by talking medication, as prescribed and I look to the DD project team as role models. Furthermore, I care and listen to my peer group.

The two years that have passed were painful and my life was meaningless and empty. My counselor urges me to focus on the present and today I go to groups regularly as I find my peers are interesting and fun to be around.

Being accepted unconditionally is what I find to be the DD program's strong point and I practice this in my personal life as well. I'm less self-conscious and I'm starting to feel comfortable about who I am.

I still have high regard for AA despite my hopeless endeavor for any significant sobriety time. However, I had to stop sharing in these groups because I felt misunderstood and frustrated. I finally realized and learned the AA program is not a friendship club.

In conclusion I think I am a success in the DD project despite my past behavior. I am a happier person when I don't drink alcohol. I listen to rules of staying on medications even though I don'' always want to. My life is new and exciting because I relate to people that bring joy and meaning to my existence.

Qualitative Data - Staff Surveys

An important component of any treatment program is the staff who provide the treatment. Their education, training and experiences interact to affect the treatment they provide. Moreover, project staff are in a unique position with first-hand experience with clients and with the program. Staff perceptions of what works and what doesn't provides valuable information for the program evaluation. To get an idea of the background of project staff, they were asked to complete a written survey in September 1999, slightly more than two years after start-up. A total of 27 forms were returned, a return rate of 100%. This included program managers and line staff. The survey included questions about staff education, career training and work experience. The survey also asked staff for their perceptions concerning the types of qualifications needed by staff working with dually diagnosed clients. Additionally, staff were asked for their perceptions concerning successful program components and criteria of client success. The lengthy written responses suggest that staff took the survey seriously and spent time to provide thoughtful answers. It was also clear that staff have an interest and passion for working with dually diagnosed clients.

Education and Training: Staff are well educated and broadly trained. Almost three fourths had at least a four-year college degree. The responses concerning education were scored by the highest degree obtained since many had more than one college degree. As Table 7.1 shows, 8 staff have a bachelor's degree, 1 has a LCSW, 8 have a master's degree, and 3 have a doctorate. Two staff have a two-year associate degree and six staff have a substance abuse certificate. The bachelor degrees came from a variety of majors, including psychology, social work, international relations, organizational behavior, nursing, anthropology, and humanities. The master's were all either in social work or counseling. The three PhDs were in psychology. In terms of licensure, two are registered nurses, 2 are MFT, 1 is an LCSW, and two of the staff with doctorates are licensed psychologists.

Table 7.1 EDUCATION

Project	AA degree	Sub. abuse cert.	Bachelor degree	LCSW	Master's degree	Doctorate
Contra Costa (n=7)	1	1	2		2	1
Merced (n=7)	1	1	4		1	
San Diego (n=7)			1	1	3	2
Santa Cruz (n=6)		3	1		2	
TOTAL	2	5	8	1	8	3

All staff had substantial additional training via workshops and conferences. With the exception of one newly hired recent college graduate, the vast majority of staff had taken several workshops on dual diagnosis. In addition, all staff, again with the exception of the new hire, had taken additional workshops dealing with substance abuse issues and mental health issues. It is quite clear that professional training is ongoing for all staff.

Previous work experience: A set of questions asked staff about their previous work experience in each field, i.e., substance abuse and mental health, in programs that were not primarily intended for treating dually diagnosed clients. The results are revealing. As Table 7.2 indicates, the vast majority have experience in several fields. For example, 89% of the staff from all programs had experience in mental health programs that were not intended for dually diagnosed clients. Less than half reported work experience in substance abuse programs not intended for dually diagnosed clients, but over 80% reported previous work experience in dually diagnosed programs. However, a number of staff noted that many of the mental health and substance abuse treatment programs did in fact serve undiagnosed substance abusing mentally ill clients. One staff from Merced explained: "On inpatient units I was the sought-out mental

health worker who was identified to work with suspected alcohol/drug - dually diagnosed."

A staff from Santa Cruz reported no previous work experience with mental health programs that were not primarily for dually diagnosed clients, but she explained, "Many of my 15 years of experience has involved working with dually diagnosed. . . . Most substance abusing clients have mental health issues and vice versa. They are not mutually exclusive."

Table 7.2 Previous Work Experience in Each field

Project	Prev. work experience in MH	Prev. work experience in Sub. Abuse	Prev.work experience working DD
Contra Costa (n=7)	7	2	6
Merced (n=7)	6	3	7
San Diego (n=7)	7	4	3
Santa Cruz (n=6)	4	4	6
TOTAL	24 (88.9%)	13 (48.2%)	22 (81.2%)

Staff were also asked in which field they had worked most of their career. A majority reported they had spent most of their career working in the mental health field, with roughly a quarter reporting most of their career was spent in the substance abuse treatment field, see table 7.3. Not quite one fifth reported most of their career was spent working in the field of dual diagnosis treatment.

7.3 CAREER EXPERIENCE Field (where staff Spent most of career)

Project	Mental Health	Substance Abuse	Dual Diagnosis
Contra Costa (n=6)[a]	2	1	3
Merced (n-7)	3	3	1
San Diego (n=7)	7	0	0
Santa Cruz (n=6)	3	2	1
TOTAL	15 (57.7%)	6 (23.1%)	5 (19.2%)

a)excludes new employee

Best Training and Qualifications for Staff: Staff were asked for their views on what would be the best training for staff who work with dually diagnosed clients. Not too surprisingly, staff recommended training that mirrored their own. Those with a college degree, felt a college degree was important; those without a degree felt that on-the-job training or personal experience as a consumer of treatment services was the best qualification. However, there was broad agreement that staff needed to be cross trained in both disciplines (i.e., mental health and substance abuse). Where responses differed was in the in means of obtaining the knowledge from both fields, whether from on-the-job experience or

through formal education. There was also broad support for work experience in the field of dual diagnosis, either as an adjunct to formal education or as the main means of education. Several staff mentioned the idea of an internship or a formal mentoring experience with a senior clinician or counselor who was experienced in working with dually diagnosed clients.

There was agreement on the personal qualities needed by staff to work with dually diagnosed clients. Although not all staff responded to this question, those that did emphasized the importance of flexibility, tolerance in working with individuals with chronic illnesses, patience, having an even-temper, and having respect for clients.

Effective Program Components: Staff were asked what program components were critical to the treatment success and what other factors they thought made their program a success. Staff mentioned a variety of program components that they thought critical to a successful dual diagnosis treatment program. Table 7.4 lists the most frequently mentioned components, in descending order of frequency. All the items listed on the table were mentioned by at least two staff. The most frequently mentioned critical component was an interdisciplinary team working together. Also frequently mentioned were the provision of a variety of treatment groups, including mental health groups (e.g., groups for manic depressives), substance abuse treatment groups, life skills groups.

Table 7.4 Most Frequently Mentioned Program Components Critical to Success of a Dual Diagnosis Treatment Program

- Teamwork/interdisciplinary team providing service
- Provision of a variety of treatment groups (e.g., mental health, substance abuse, etc)
- Equal emphasis of mental health and substance abuse treatment
- Flexible approach to clients
- Development of links to other community resources
- Assertive Case management
- Acceptance of relapse
- Non-judgmental approach to clients

Staff were also asked to name other factors, in addition to program components, that they believe have made their dual diagnosis treatment program a success. Many of the listed factors deal with staff skills and characteristics. The most commonly mentioned factors are empathy of staff for clients, teamwork (multidisciplinary teams that support each other & share information), staff skills & training, and the development of links to other agencies in the community, see Table 7.5, factors listed in descending order.

Table 7.5 Other Factors That Have Made Projects Successful

- Empathy of staff for clients
- Teamwork
- Establishing links to other community agencies
- Flexible attitude of staff
- Highly skilled & trained staff
- Flexible supervisors/managers
- Creativity by staff
- Peer support for clients

Indicators of Client success: Staff were asked what they considered to be indicators of client success. Among the most frequent responses were reductions in substance abuse and mental illness symptoms. It should be noted that this is not the same as abstinence. Although a few staff did mention sobriety or abstinence, the most frequent responses mentioned reduction. As one staff member from Merced explained, "Success is not always elimination of all drug use . . . . Recovery is not a destination but a process." As Table 7.6 indicates, in descending order, other indicators included stable housing, clients learning to manage their own illness - one staff member described it as "the client is participating his own recovery." Other indicators commonly mentioned include compliance with medication, compliance with program (e.g., attendance), uses peer support, improved relationships with family and friends, and engagement with staff. Most of these indicators are included in the evaluation's quantitative measures of program outcome. For example the repeated administration of the ASI Lite, Basis32, and the K-Axis will produce measures over time of the changes in substance abuse.

Table 7.6 Indicators of Client Success

- Reduction in substance abuse
- Reduction in mental illness symptoms
- Stable housing
- Learns symptom management techniques and has knowledge of recovery process
- Compliant with meds/program
- Uses peer support/recognizes need for it
- Improved relationships w/family/friends
- Engagement w/project staff
- Clean and sober
- improved social life
- involvement w/job/school/hobbies

VIII. CONCLUSIONS

Common Themes

Despite the differences between the four projects, there are some common experiences that all have encountered. Foremost among these is the challenge of engaging the client in treatment. Even though these programs are specifically designed to meet the needs of the dually diagnosed clients, clients are still resistant to participation. For example, the Merced program receives referrals of individuals who have been hospitalized while in crises. These clients are referred to the dual diagnosis program when discharged. However, when they show up at the treatment program, if in fact they do show up, some will deny having any problems and will not participate. The Merced program manager notes that once the crises is over, the client doesn't see the need for treatment. Another example, this one from the project manager at the Contra Costa program who estimates that it often takes several months of repeated contacts from his dual diagnosis specialists before some clients will become engaged in treatment. Additionally, clients will drop out after several months of irregular participation. This difficulty in engaging clients in treatment has been noted in many studies and it seems to typify dually disordered clients (Drake et al., 1998; Kofoed, Kania, Walsh, & Atkinson, 1986; Lehman, Herron, Schwartz, & Myers, 1993; Mierlak et al., 1998; Stecher et al., 1994). It is obvious from the experience of these four projects that even with programs specifically tailored to the dually diagnosed population, engagement can be difficult and time-consuming.

A second experience common to all four programs is that relapse is common. While professionals working with dually diagnosed individuals are aware of the chronicity of both mental illness and substance abuse disorders, many non professionals expect a treatment program to "cure" clients of mental health and addiction problems. In these four programs it is clear that these two co-occurring disorders are chronic and relapse is common. The typical life crises that every human experiences, e.g., loss of a job, can cause relapse in either condition for the dually diagnosed client. Relapse has made data collection a challenge since many clients are in crises and unable to complete the evaluation instruments at the scheduled time. The chronicity of both problems has been well documented in the literature (Drake et al., 1998; Drake & Wallach, 1989; Hoff & Rosenheck, 1998).

A third common experience is the realization that housing is a critical element in stabilizing clients. Many clinical studies have noted that dually diagnosed individuals seem to be predisposed to homelessness because their substance abuse and treatment noncompliance result in disruptive behaviors and loss of social support, which in turn, leads to housing instability (Drake et al., 1991; Osher & Kofoed, 1989; Jerrell & Ridgely, 1995; Sargent, 1989). The four projects responded to this need by developing housing themselves or by working closely with local housing providers. The Santa Cruz program started off as a residential treatment program, but soon realized they needed a transitional housing component. They developed a transitional house and have also worked with local housing providers to develop housing options for graduates of their program. The Contra Costa program has worked to develop housing options

within the community. In one case, the program manger worked with a private landlord to convert a rental house into a housing option for four dually diagnosed men. Merced County Mental Health has entered into a contract with a licensed residential recovery home for treatment of the dually diagnosed males. The county is working on developing similar housing for female clients. San Diego has developed extensive links to the housing providers in San Diego County, both for transitional and permanent housing.

A fourth common experience is that all four programs have had to revise and sometimes expand their scope of activities in order to meet diverse client needs The dually diagnosed clients differ in their situations and their needs. Some come into the program ready to address their problems, others arrive unsure of where they are or why they should be there. All four programs have continually developed collaborations and connections within county agencies and with service providers in the private sector. The housing activities mentioned above are perhaps the most obvious example, but in other areas as well, the four projects have continued to evolve their service model in response to the complexity of client needs.

Treatment Effectiveness

Success with this population will be measured by reduction in their use of high intensity services, emergency mental and physical health care services, and criminal justice services. From the clients' perspective, success will be measured by improvement over time in client functioning and client satisfaction. Cost savings will also provide another measure of treatment effectiveness. In other words, rather than a single measure of success (e.g., sobriety), this evaluation is using multiple measures of treatment effectiveness. This is particularly important to note since frequently people expect a treatment to "cure" the problem being treated. As the baseline data presented in this report make clear, dually diagnosed clients have multiple problems, at least two of which are chronic and relapsing. It is conceivable that these programs will produce improvement in some areas but not in others. Some clients may indeed achieve sobriety and be free of mental health symptoms, but others may only achieve improvement in one area. Using a simple measure of success (e.g., sobriety) is to miss the great many changes that treatment may have produced.

The data presented in this report lay the groundwork for assessing program impact. The final report will provide the analyses of the program impact. In the meantime, the projects have looked at preliminary changes in some of these measures and are feeling optimistic about the outcomes. Certainly, from successful clients there is consistent testimony that the programs are making significant improvement in their overall quality of life. The programs have reported preliminary findings that are suggestive of program success. These are presented in Appendix B. Note that these reports are based on incomplete samples, the methodology is unclear (especially in regards to sample attrition) and the results will change as more cases are added to the sample. But it offers a peek, of sorts, into possible findings. The final report will provide detailed analyses of all the measures of program impact and is scheduled to be presented to the Dual Diagnosis Task Force on December 5, 2001.

APPENDIX A
Demographic Data for Non Participants

Table A-1 Contra Costa Client Profile
for Non-Participating Clients
N=20

Gender	#	%
Female	7	35
Male	13	65
Total	20	100
Age		
Under 20	0	0
20 to 29	2	15
30 to 39	5	38
40 to 49	6	46
Above 49	0	0
Unknown	7	n/a
Total	20	100
Race/Ethnicity		
African American	16	80
White	3	15
Latino	1	5
Total	20	100
Primary Mental Health Diagnosis		
Schizophrenia	15	75
Psychotic Disorder NOS	2	10
Depressive Disorders	2	10
Bipolar Disorders	1	5
Total	20	100
Primary Substance-Related Diagnosis		
Cocaine Abuse/Dependence	10	50
Alcohol Abuse/Dependence	2	10
Polysubstance Abuse/Dependence	4	20
Other	2	10
Opioid Abuse/Dependence	1	5
Cannabis Abuse/Dependence	1	5
Total	20	100
*Number includes only clients that did not consent to participate in evaluation		

Merced Project Client Profile
for Non-Participating Clients
N=36*

	#	%
Gender		
Female	12	38.7
Male	19	61.3
Unknown	5	n/a
Total	36	100.0
Age		
Under 20	1	3.2
20 to 29	8	25.8
30 to 39	8	25.8
40 to 49	12	38.7
Above 49	2	6.5
Unknown	5	n/a
Total	36	100.0
Race/Ethnicity		
White	18	58.1
Latino	8	25.8
African American	3	9.7
S.E. Asian	1	3.2
American Indian	1	3.2
Unknown	5	n/a
Total	36	100.0
Primary Mental Health Diagnosis		
Depressive Disorders	6	29
Psychotic Disorder NOS	7	33
Bipolar Disorders	3	14
Schizophrenia	3	14
Adjustment Disorder	1	5
Other	1	5
Unknown	15	n/a
Total	36	100
Primary Substance-Related Diagnosis		
Alcohol Abuse/Dependence	6	29
Polysubstance Abuse/Dependence	6	29
Amphetamines Abuse/Dependence	3	14
Cocaine Abuse/Dependence	3	14
Cannabis Abuse/Dependence	2	10
Other	1	5
Unknown	15	na
Total	36	100

Table A-3 Santa Cruz Project Client Profile
for Non-Participating Clients
N=17

	#	%
Gender		
Female	4	36.4
Male	7	63.6
Unknown	6	n/a
Total	17	100.0
Age		
Under 20	1	9.1
20 to 29	0	0.0
30 to 39	5	45.5
40 to 49	5	45.5
Above 49	0	0.0
Unknown	6	n/a
Total	17	100.0
Race/Ethnicity		
White	8	72.7
Other	3	27.3
Unknown	6	n/a
Total	17	100.0
Primary Mental Health Diagnosis		
Schizophrenia	8	53.3
Bipolar Disorders	4	26.7
Depressive Disorders	1	6.7
Psychotic Disorder NOS	2	13.3
Unknown	2	n/a
Total	17	100.0
Primary Substance-Related Diagnosis		
Polysubstance Abuse/Dependence	6	40.0
Alcohol Abuse/Dependence	5	33.3
Cannabis Abuse/Dependence	1	6.7
Cocaine Abuse/Dependence	2	13.3
Amphetamines Abuse/Dependence	1	6.7
Unknown	2	n/a
Total	17	100
*Number includes only clients that did not consent to participate in evaluation		

APPENDIX B

Note: The reports and tables below present some preliminary information on treatment effects. These reports are based on incomplete samples, the methodology in many cases is unclear and the results will change as more cases are added to the sample.

1. DUAL DIAGNOSIS DEMONSTRATION PROJECTS

Reports from the Projects

While the State will not have compiled final data until the conclusion of project funding, each project has anecdotal evidence to support the hypothesis that integrated services result in improved client outcomes and cost avoidance. These preliminary findings are as follows:

- The San Diego County project has preliminary data which supports the premise that integrated treatment can improve outcomes in patients with interacting mental and substance abuse disorders. To date, 152 adult outpatient clients have completed a range of self-report and semi-structured interview measures over an 18-month period. Statistical analyses have found significant improvement on a variety of measures which assess psychiatric status, behavior and symptom distress, depression, addiction severity, health status, and quality of life. Project staff anticipate that with continued treatment and follow-up measurements, these findings will be even more robust. Additional study will determine the effects of integrated treatment on costs for health care and criminal justice involvement in this challenging population.

- The Merced County project has admitted a total of 231 clients (through 10/31/99), 194 of whom have agreed to participate fully in the evaluation. Clinical data have been collected from 177 clients at admission and 66 clients at 6-month follow-up. Clients in Merced have shown significant improvements after six months on scales measuring “Psychological Impairment,” “Dangerousness,” and “Substance Abuse.” This project has also demonstrated how to educate the human services community about identifying and treating clients with combined substance abuse and mental illness. The large sample that the Merced project reaches because of its wide recruiting network will afford us an unusual opportunity to assess the overall impact of coordinated dual diagnosis services.

- The Santa Cruz County project has admitted a total of 73 clients (through 10/31/99), 57 of whom have agreed to participate fully in the evaluation. Clinical data have been collected from 56 clients at admission and 30 clients at 6-month follow-up. Santa Cruz clients have achieved improvement across all Axis-V subscales, with a statistically significant reduction in their “Substance Abuse.” This project has focused on developing long-term “clean and sober” independent living arrangements for its clients, and has gradually developed a “neighborhood” with several such facilities. Longer-term follow-up data will help us to assess the value of their approach.

- The Contra Costa County project has admitted a total of 66 clients (through 11/30/99), 48 of whom have agreed to participate fully in the evaluation. Clinical data have been collected from 48 clients at admission and 22 clients at six-month follow-up. This project focuses on clients who are more severely ill. These clients begin with generally poorer scores on most clinical measurements than clients in the other projects. Nonetheless, clients from this site have shown improvement in "ADL-Occupational Skills" and "Substance Abuse." An additional year of data collection will allow us to increase the sample size for both six-month and 12-month follow-up assessments and to determine whether these promising results can be sustained.

2. The tables below were presented by the Contra Costa Project during a presentation to the Dual Diagnosis Task Force.

Table 1: Contra Costa County Dual Diagnosis Project
(Client Hospitalization Status: County Hospital, IMD, and State Hospital)

Hospitalization for All Clients (n =25)	**Before**	**After**
Days in Hospital per Year (n=25)	42.0	43.5
Decreased Days in Hospital per Year (n=19)	57.2	6.8
Increased Days in Hospital per Year (n=6)	10.5	154.6

Table 2: Contra Costa County Dual Diagnosis Project
(Client Substance Abuse and Mental Health Profile)
N=25

	Before		After	
Substance Abuse	#	%	#	%
Daily	17	68	2	8
Weekly	8	32	5	20
Monthly	0	0	4	16
Quarterly	0	0	2	8
Semi-Annually	0	0	7	28
Sober for a Year	0	0	5	20
Mental Health Symptoms				
Substantial	19	76	4	16
Moderate	4	16	4	16
Fair	1	4	9	36
Minimal	1	4	8	32
Not at All	0	0	0	0

Table 3: Contra Costa Dual Diagnosis Project
(Client Housing and Financial Status)
N=25

	Before		After	
Housing Status	#	%	#	%
Homeless	13	52	0	0
Independent Living	3	12	11	44
Living with Relatives/Friends	3	12	0	0
Shared Independent Living	0	0	62	24
Room and Board	2	8	1	4
Board and Care	2	8	3	12
IMD	0	0	1	4
Hospital	0	0	2	8
Residential Tx	2	8	1	4
Financial Status				
SSI	21	84	20	80
No Income	24	8	4	16
Other Public Assistance	21	8	1	4

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